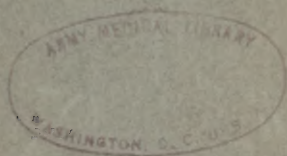


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CHEMICAL WARFARE SERVICE
FIELD MATERIEL DATA



RESTRICTED



JULY 1, 1943

UG 447 U576c 1943

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FOREWORD

These data supplement the Chemical Warfare Service Supply Catalog, July 1, 1941.

In compiling these data, all articles of Chemical Warfare Service materiel, equipment, accessories, and supplies have not been included. The rapid mobility of field units has necessitated a separate catalog, which would be light and compact, yet contain all the pertinent information of C.W.S. materiel as to nomenclature, description, use, packing, shipping, repair, and basis of issue.

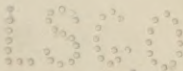
Items in these data follow, as closely as possible, the nomenclature under which they have been standardized as recorded in the Book of Standards, Chemical Warfare Service, and in the Minutes of the Chemical Warfare Technical Committee meetings which, in most cases have been approved by the Adjutant General.

Information of each item, sufficient to identify it on inspection, is given for the purpose of distinguishing it from others in a similar category. A description or information appearing in these data is not to be interpreted as an operating directive in any case.

Information and logistical data on the unit weights and cubages of articles have been compiled from facts received from C.W.S. Depots, Ports of Embarkation and the approved specifications and drawings covering the articles; however, this should be considered only as a guide in the preparation of transportation estimates and should not be used as a criterion by any person actually engaged in and responsible for making shipments.

Errors in the information given herein, as well as suggestions for changes should be reported to the Chief of Chemical Warfare Service.

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1943

SECTION A

FIRST AID

0321

PROTECTION AND FIRST AID

When Gas is Detected or When the Gas Alarm Sounds: --

1. Stop breathing.
2. Dispose of arms and headgear so they do not touch ground.
3. Remove mask from carrier; place thumbs under lower head-harness straps; and, holding facepiece, with fingers extended above the eyepieces, place chin in facepiece and seat head-harness, making a comfortable, air-tight seal.
4. Clear mask by placing right hand over outlet valve, crimping the hose with the left hand and exhaling. Only then resume normal breathing.
5. Examine self and equipment for traces of contamination.
6. Always test for gas before removing mask.

Caution:

Do not rely solely on odors for the detection of gases for the odor may be disguised, or the gas odorless. When in doubt, put on mask.

Observe direction of prevailing wind. Get upwind of gassed areas whenever possible.

Gases are heavier than air; stay out of low places.

Care of Gas Casualties:

1. Act promptly and quietly. Be calm.
2. Put mask on patient if gas is still present. If mask is on, check for adjustment. If mask is not available, wet a handkerchief or other cloth and have patient breath through it.
3. Keep patient at absolute rest; loosen clothing.
4. Remove patient at absolute rest; loosen clothing.
5. Summon medical aid; if possible, send patient to hospital.
6. Do not permit patient to smoke.
7. Be guided by following chart.

CHEMICAL WARFARE

Class		Agent	Symbol & Mark	Odor	Color & State In Field	Persis- tency	
Casualty Agents	Green Markings	Vesicants	Mustard	H Gas	*Garlic, horse radish	Dark, oily liquid or 3 to 20	
				Old HS		colorless gas	days
			Nitrogen Mustards.	HN Gas	Soapy - fishy. Very little odor	Oily liquid, soft solid or colorless gas	1 day to several weeks
			Lewisite	L Gas	*Geraniums	Liquid or colorless gas	1 to 7 days
			Ethyldichlor- arsine	ED Gas	Biting, irritant	Liquid or colorless gas	1 to 12 hours
	Red Markings	Lung Irritant	Phosgene	CG Gas	Fresh hay, ensilage	Colorless gas ss	1 to 10 minutes
		Sys- temic Poi- sons	Hydrocyanic acid	AC	Almonds	Colorless gas	Up to 1 minute
			Arsine	SA	Almost odor- less	Colorless gas	1 to 10 minutes
		Lacri- mators	Chloraceto- phenone	CN Gas	Apple blos- soms	Colorless gas	10 minutes
			Chloraceto- phenone solu- tion	CNS Gas	Sweetish	Liquid or color- less gas	1 to 50 minutes
Screening Smokes	Yellow Markings	Irr. Smoke	Adamsite	DM Gas	Coal smoke. very little odor	Yellow smoke	10 minutes
			White phos- phorus	WP smoke	Burning matches	White smoke	
			HC mixture	HC smoke	Sharp, acrid	Gray smoke	
			Titanium tet- rachloride	FM smoke	Mild, acrid	White smoke	
			Sulfur trioxide	FS smoke	Acrid	Dense white smoke	
	Chlorsulfonic acid						
		Crude oil	CO smoke	Burning oil	Dense black smoke		
		Incend. Purple Mks.	Thermate	TH incen		White smoke	
						Red flame	
				Magnesium	TH incen		White smoke
						White Flame	

FIRST AID

Effects On Body	Protection Needed	First Aid
Irritates eyes and lungs. Blisters.	Gas mask & protective clothing. Protective cover and eye shield against spray	Blot liquid from skin. Rub ointment in with fingers; remove. Repeat three times. Rinse eyes with water from canteen.
Irritates eyes and lungs. Blisters. Affects blood and nerves		Treat as for mustards except use BAL ointment in eyes before flushing with water.
Irritates eyes and lungs. Blisters. Causes lacrimation.		
Irritates lungs, causes lacrimation. Blisters		
Attacks lungs. Choking and coughing.	Gas Mask	Keep warm and quiet. Give non-alcoholic stimulant. Loosen clothing.
Dizziness, headache, convulsions Paralyzant		Artificial respiration.
Dizziness, vomiting. Affects blood		Give nonalcoholic liquids.
Skin and eye irritation. Crying		Do not rub or bandage eyes. Face wind
Skin and eye irritation. Crying		
Headache, nausea, violent sneezing, temporary mental depression		Remove to pure air. Loosen clothes. Keep in shade.
Solid particles, burn skin	Avoid particles	Put wet rag on affected skin. Keep rag wet with water from canteen.
Harmless	Gas Mask in high concentration	None
Harmless		None
Irritates skin		Wipe off liquid if present and wash with water from canteen.
Harmless		None
Burns	Water & Sand	Spray burning areas with water. Remove burning particles.
Burns		

SECTION NO. 1

AGENTS

RESTRICTED

ACETYLENE TETRACHLORIDE (TETRACHLORETHANE)

Price \$0.10 lb.

Description. - Colorless liquid; M.P. - 33°F.; B.P. - 297°F. Density 13.34 lbs./gal. Corrosive to metals in presence of moisture; metal containers must be securely stopped and rust spots cleaned and repainted immediately. Vapor and liquid are toxic; when mixed with dilute alkalis, explosive compounds may result. Is noninflammable and an excellent solvent for organic compounds. Used by C.W.S. as solvent for noncorrosive decontaminating agent and as volatile solvent in impregnating process.

PARAFFIN: CHLORINATED

Price \$0.13 lb.

Description. - Similar to paraffin in appearance and texture. Melting point 124° - 130°F. Density approximately 9.5 lbs./gal. Insoluble in water but soluble in organic solvents. Decomposes slowly when exposed to air and direct sunlight. Not a serious fire hazard but is combustible and should be kept away from open flames. Used as binding agent in impregnating processes.

Name	CWS Symbol	Color and physical state in the field	Odor	Melting point (°F)	Boiling point (°F)	Volatility at 20°C (68°F) per 1000 cu. ft. air	Vapor density compared to air	Density of liq. at 20°C (68°F)	Persistency	Action on metals and stability on storage
Chlorine \$0.04 price (lb)	Cl	Greenish yellow gas	Disagreeable, Pungent	-152	-30	19369 oz.	2.4	1.4	Vaporizes almost immediately	Stable in iron cylinders if dry. Corrodes metal rapidly if moist
Phosgene \$0.12 price (lb)	CG	White cloud changing to colorless gas	Ensilage, Fresh hay	-155	47	6370 oz.	3.4	1.37	1 - 10 minutes (nonpersistent)	Stable in dry steel containers. Corrodes metal rapidly if moist.
Chloropicrin	PS	Oily liquid changing to colorless gas	Sweetish chloroform or flypaper	-92	234	165 oz.	5.6	1.66	Summer: 1 hr. in open, 4 hrs. in woods. Winter: 12 hrs. in open, 1 wk in woods	Stable for long periods in steel containers. Produces only slight tarnish on metals.
Mustard \$0.21 price (lb)	H	Dark brown liquid changing	Garlic; horseradish	58	443	0.96 oz.	5.4	1.27	Summer: 4 to 5 days in open, 1 wk. in woods. Winter: several wk	Stable in steel containers. No action on metals.
Lewisite \$0.57 price (lb)	L	slowly into a colorless gas	Like geraniums, then biting	0	374	4.5 oz.	7.1	1.88	Summer: 1 day in open, 2 or 3 days in woods. Winter: 1 wk or more	Stable in steel containers. No action on metals

Action with water	Odor detectable (oz./1000 cu. ft. of air)	Min. irritating con. (per 1000 cu. ft. air)	Lethal con. (for 30 min. per 1000 cu. ft. air)	Method of neutralizing	Munitions suitable for use	Marking on munitions	Protection required	Class	Remarks
Some-what sol soluble Forms HCL & HOCL	0.01	3 min. exposure to 0.05 oz.	2.5 oz.	Alkali (Solution or solid)	Mixed with CG & PS in cylinders & LP shell	Cl Gas 1 Gr. band	Gas Mask	LUNG IRRITANTS CASUALTY AGENTS VESICANTS	Stored and shipped in steel cylinders. Tanks or ton containers as compressed liquid. Not a fire hazard.
Hydro-lyzes rapidly forming HCL & CO ₂	0.004	0.044 oz.	0.29 oz.	Steam or hot water. Alkalies, amines.	Chemical mortar & LP shell; cylinders	CG Gas 1 Gr. band	Gas mask		Stored and shipped in steel cylinders or ton containers as compressed liq. Not a fire hazard.
Very slightly soluble. Hydro-lyzes with difficulty	0.007	3 min. exposure to 0.02 oz	.0174 oz.	Sodium sulfite solution in alcohol.	Mixed with CN in 75 mm & cml mortar shell, air bombs, Ap spray. Mixed with CG in LP shells	PS Gas 2 Gr. bands	Gas mask		Substitute standard irritant gas. Not a fire hazard
Hydro-lyzes very slowly. Products are non-toxic.	0.0018	0.002	0.07 oz.	Bleaching powder. 3% Na ₂ S in water, steam, agt, decon., non-cor.	Ap spray & bombs, artillery	H Gas 2 Gr. bands	Gas mask & protective cloth.		Stored and shipped in steel drum or ton containers Not a fire hazard
	0.0014	0.008 oz.	0.05 oz.	Alcoholic sod. hydrox bleaching powder; agent decon non-cor.	& cml mortar shell, land mines.	L Gas 2 Gr. bands			Storage and shipping similar to mustard.

Name	CWS symbol	Color and physical state in field	Odor	Melting point (°F)	Boiling point (°F)	Volatility at 20°C (68°F) per 1000 cu. ft. air	Vapor density (compare to air)	Density of liquid at 20°C (68°F)	Persistence	Action on metals and stability on storage
AC \$0.72 (lb) price	AC	Colorless gas	Pittery Almonds	59	80		0.4	0.8	nonpersistent	Tarnishes metal slightly. Generally unstable on long storage.
Tear gas \$1.76 (lb) price	CN	Bluish-gray smoke from burning type mun. colorless from shell	Apple blossoms	138	476	0.1 oz.	5.2	1.3 (solids)	10 min. solid may persist for days. (Wks in winter)	Stable on storage. Tarnishes steel slightly.
Tear gas, solution \$0.14 (lb)	CN	Colorless liquid changing to colorless gas	Like Benzene	19				1.14	Up to 50 hours	Similar to CN
Tear gas, solution \$0.88 (lb) price	CN	Colorless liquid changing to colorless gas	Like fly-paper	35	142		About	1.5	Summer: 1 hr. open; 2 hrs. woods. Winter: 6 hrs. open; 1 wk. woods	Similar to CN
Hamite 1.03 (lb) price	DM	Yellow smoke	Coal smoke	383	770	Negligible	Solid	1.85 (Solid)	10 min.	Very slight action on metals. Stable in steel containers.
i-ethylchlor-sine	DA	White-gray cloud or smoke	Shoe-polish	111	721 decomposes	Do	Do	1.4 (solid)	5 to 10 minutes	No action. When dry. Stable when pure.

Action with water	Vapor let. stable (oz./1000 cu.ft. of air)	Mil. irritating con. (per 1000 cu.ft. air)	Lethal con. (for 30 min.) per 1000 cu.ft. air	Method of neutralizing	Munitions suitable for use	Marking on munitions	Protection required	Class	Remarks
Soluble. Solution is unstable.	0.0001			Alkalis; Bleaching powder, etc.	Frangible grenade		Gas mask	HYPER-TOXIC	Vapor and liquid are violent poisons.
None. Not readily hydrolyzed.	0.0001	0.012	0.34	Hot sodium carbonate solution.	Candles, grenades, artillery & cm mortar shell, Ap bombs, CN capsule	CN Gas 1 red band	Gas mask	HAZARDOUS	solid - crystalline or powdered. Stored in sealed iron, steel or wooden barrels. Not a fire hazard.
None.				Alcoholic sodium hydroxide or caritol solution.	Arty & cm mortar shells; Ap bombs & spray; explosive type	CNB Gas 1 red band	Gas mask	HAZARDOUS	Solution of CN in chloroform & benzene. Vapor is inflammable.
None.		3 min. exposure to 0.02 oz	3.8 oz.	Hot solution of sodium carbonate & sodium sulfite	Arty & cm mortar shells; Ap bombs & spray; frangible grenade	CNB Gas 1 red band	Gas mask	HAZARDOUS	Solution of CN in chloroform & chlorpicrin. Not a fire hazard.
Insoluble; hydrolyzes slowly	Almost no odor	3 min. exposure to 0.002 oz.	0.25 oz	Chlorine; Chlorine of lime, etc.	Burning type mun. candles, grenades, etc.	DM Smoke 1 red band	Gas mask	HAZARDOUS	Not a fire hazard.
Slowly hydrolyzes	0.0003	3 min. exposure to 0.007 oz.	0.80 oz.	Sodium hydroxide, chlorine, etc.	Burning type munitions	DA Smoke 1 red band	Gas mask	HAZARDOUS	Not a fire hazard.

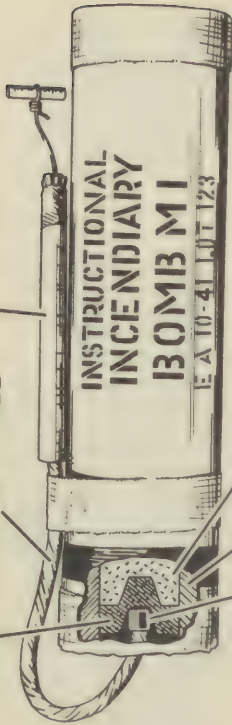
Name	CWS symbol	Color & physical state in field	Odor	Melting point (°F)	Boiling point (°F)	Volatility at 20° C (68° F) per 1000 cu. ft. air	Vapor density comp. to air	Density of liquid at 20° C (68° F)	Persistence	Action on metals and stability on storage
White phosphorus \$0.12 (lb) price	WP	Waxy solid. Burns rapidly on contact with air, producing white smoke	Like matches	111	554			1.83 (Solid)	10 min.	No action on metals. Stable out of contact with oxygen.
Hexachloroethane-mixture \$0.18 (lb) price	HC	White smoke produced by burning mun. only.	Acrid; suffocating	365 (sublime)	365 (sublime)			2.0 (solid)	While burning	Stable in storage. No action on metals if dry.
Titanium tetrachloride \$0.55 (lb) price	FM	White smoke	Acrid	-22	275			1.7	10 min.	No effect on metals if dry. Corrosive if wet. Stable in steel steel cont.
Sulfur trioxide-chlorosulfonic acid solution \$0.05 (lb) price	FS	Dense white smoke	Sharp, Acrid	Below -22	176 decomposes			1.9	5 to 10 min.	Stable when dry. Corrodes metal rapidly in presence of water.
Molasses residuum \$0.11 (lb) price	MR	Dark brown syrupy liquid	Molasses	26	214			1.09	Odor detectable for 45 min. to 1 hr. when sprayed from airplane	No action on metals. Stable for at least 6 mos. in cool shaded location, with phenol added to prevent fermentation

Action with water	Odor detectable (oz./1000 cu. ft. of air)	Min. irr. con. (per 1000 cu. ft. air)	Lethal concn. (for 30 min per 1000 cu. ft. air)	Method of neutralizing	Munitions suitable for use	Marking on munitions	Protection required	CLASS	REMARKS
None				None needed for smoke. Copper sulfate solution prevents burning. Water will extinguish burning WP.	Arty & cml mortar shells Ap bombs, grenades	WP smoke 1 yellow band	Avoid particles	SIMULATED AGENT SCREENING SMOKE	Dangerous fire hazard. Store under water.
Insoluble but may ignite on contact			None	None needed	Burning type; grenades; pots; candles, etc. Base ejection shells	HC smoke 1 yellow band	None		Nonpoisonous; shipped in sealed steel drums. Keep dry.
Hydrolyzes				Alkali; solid or solution	Arty & cml mortar shells AP spray & bombs	FM smoke 1 yellow band	None for ordinary cloud.		Liquid is caustic. Stored & shipped in sealed steel drums. Keep dry.
Reacts violently				Alkali; solid or solution	Arty & cml mortar shells; Ap spray & bombs; frangible grenades.	FS smoke 1 yellow band	Gas mask; rubber gloves when handling liquid.		Liquid burns like strong acid. Store in dry place - tightly sealed.
Soluble No action				None needed	Ap spray & bombs, artillery & cml mortar shell, land mines.	MR 2 green bands	None needed		Used for training purposes to simulate H. Non-toxic.

FIRST FIRE CHARGE

FUZE LIGHTER

SAFETY FUZE



THERMATE

MAGNESIUM BODY

STARTING MIXTURE

TAD 71

BOMB, INCENDIARY, INSTRUCTIONAL, M1

FUZE LIGHTER

SAFETY FUZE

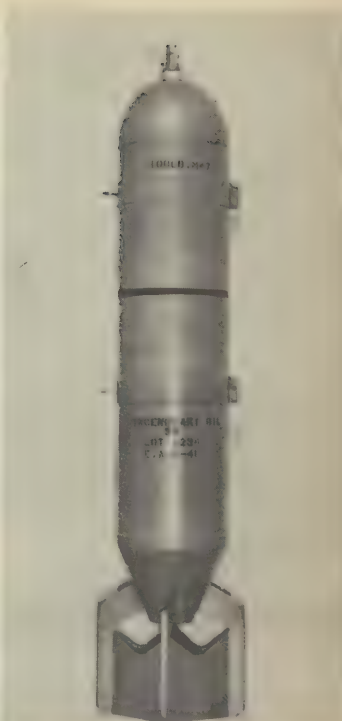
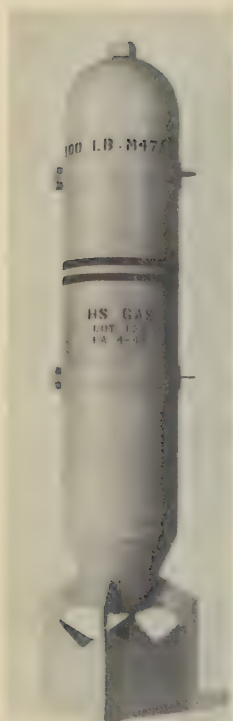


INCENDIARY
M 2
LOT 123

THERMATE

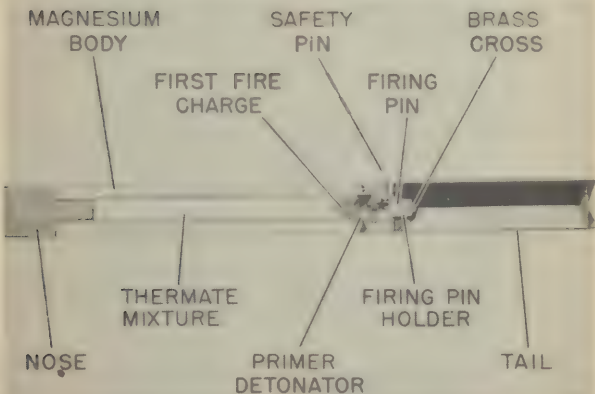
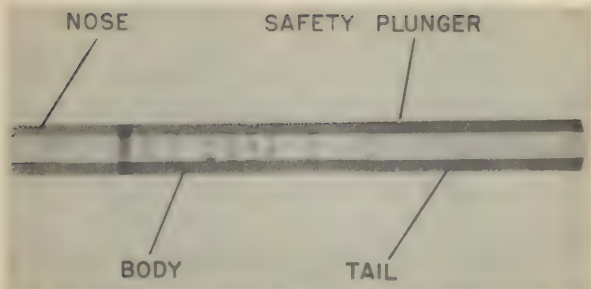
FIRST FIRE CHARGE

BOMB, INCENDIARY, INSTRUCTIONAL, M2

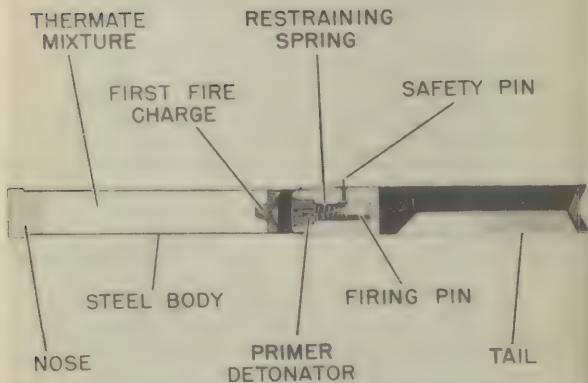


Left - - BOMB, INCENDIARY, 100-LB., M47

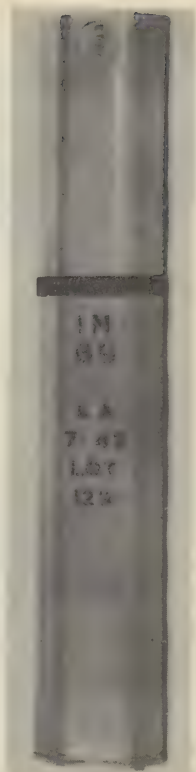
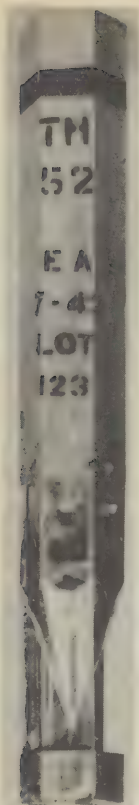
Right - - BOMB, GAS, PERSISTENT (HS), 100-LB., M47A1



BOMB, INCENDIARY, 4-LB., AN-M50-A1

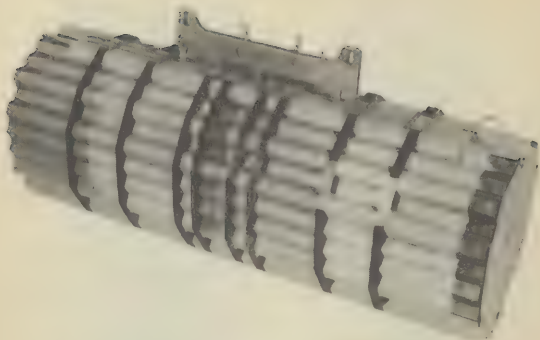


BOMB, INCENDIARY, 4-LB., AN-M54¹

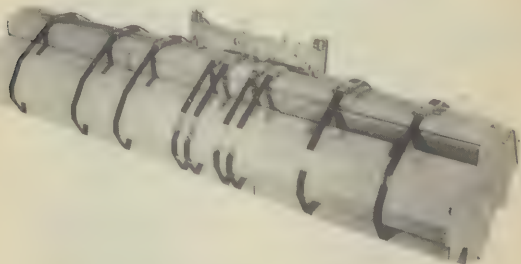


Left -- BOMB, INCENDIARY, 2-LB., AN-M52

Right -- BOMB, INCENDIARY, OIL, 6-LB., AN-M69



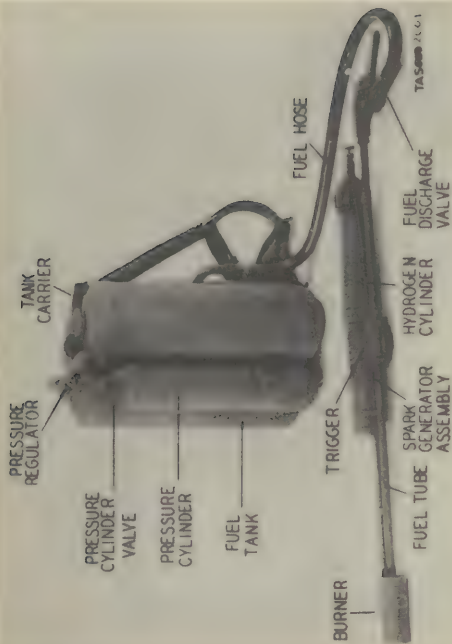
CLUSTER, 500-LB., INCENDIARY BOMB, M1, WITH BOMB SHACKLE
(128-4 LB., AN-M50-A1 AND M50X-A1 INCENDIARY BOMBS).



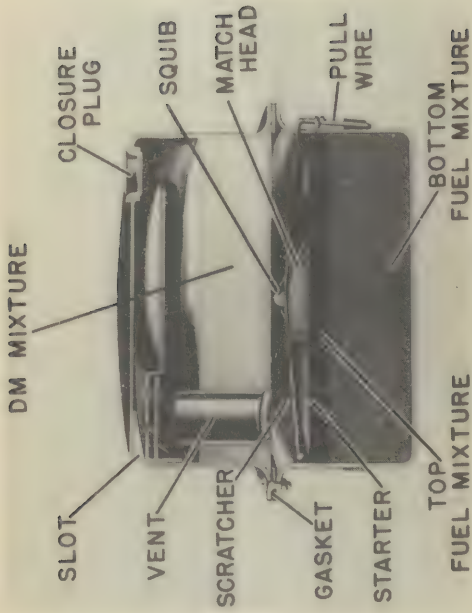
CLUSTER, 500-LB., INCENDIARY BOMB, M4, WITH BOMB
SHACKLE, (60-6 LB., AN-M69 INCENDIARY BOMBS).



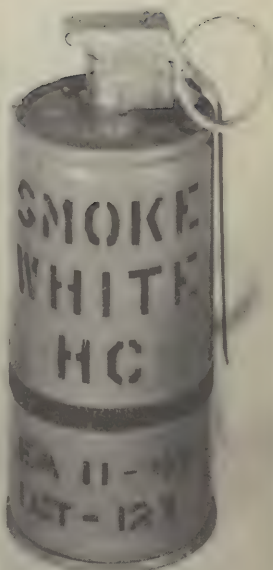
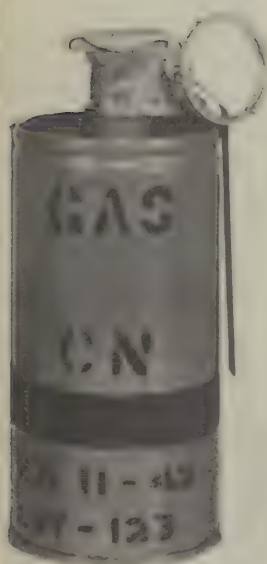
CYLINDER, PORTABLE, CHEMICAL MIA2, IN CARRYING POSITION



FLAMETHROWER, PORTABLE, MIA1



CANDLE, GAS, IRRITANT, DM, M2



Left -- GRENADE, HAND, TEAR, CN, M7

Right -- GRENADE, SMOKE, WHITE, HC, AN-M8

HINGE PIN

STRIKER
SPRING

STRIKER

MOISTURE CAP

PRIMER

POWDER
TRAIN

LEVER---

FILLING

FIRST FIRE
MIXTURE

RING

FUZE BODY

TAPE

TH

INCEN

BLUE GRAY
(COLOR)

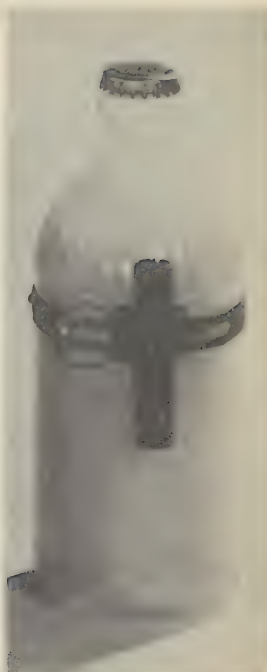
EA

LOT 123

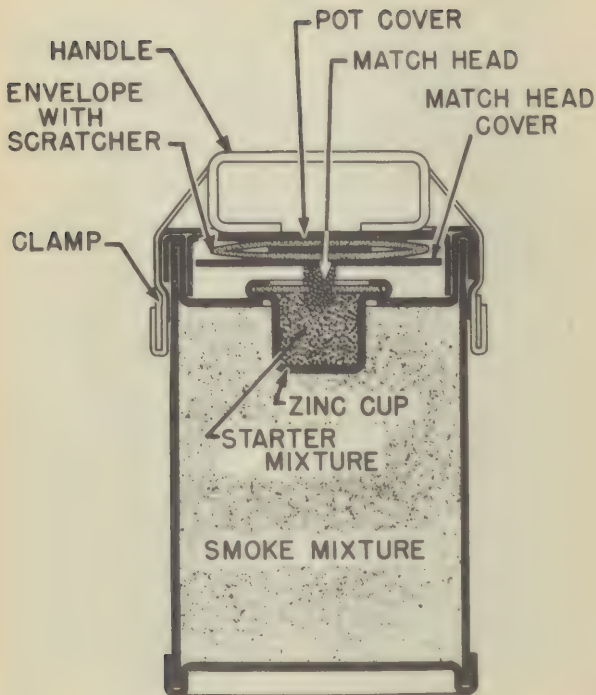
PURPLE BAND
& MARKING

EA

LOT 123



GRENADES, FRANGIBLE, M., FS AND IM FILLETS



POT, SMOKE, HC, M1



POT, SMOKE, FLOATING, M4

LIVENS
PROJECTOR



75 MM.
HOWITZER



421 NCML.
MORTAR



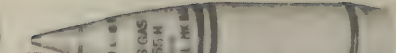
81 MM.
MORTAR



75 MM.
GUN



155 MM.
HOWITZER



105 MM.
HOWITZER



TAS 1592

SHELLS, CHEMICAL FILLED



A

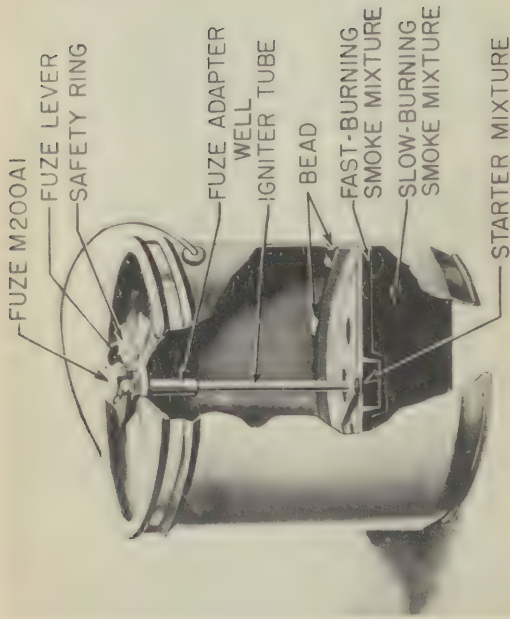


B



C

MINE, LAND, CHEMICAL, (a) WITH PRIMAVAL M AND FULL-WIRE FUZE, (b) WITH M4 FUZER, (c) WITH FULL-WIRE FUZE (COMMERCIAL).



POT, SMOKE, FLOATING, HC, M4A1

SECTION NO. 2

AMMUNITION AND WEAPONS

CWS INCENDIARY, SMOKE AND CHEMICAL BOMBS

Nomenclature	Incendiary Smoke or Cml Material Used	Approx. Wt. of Filling (lbs)	Approx. Burning Time or Bursting Radius	Explosive Charge	Remarks	Price
Bomb, Incendiary, Instructional, M1	Cylindrical Magnesium Alloy Body with Thermate Charge	0.38	5 Minutes	None	For instructional purposes only. Measures approximately 2" in diameter by 9" long.	(ea.) \$ 1.43
Bomb, Incendiary, Instructional, M2	Thermate Charge in a Cylindrical Steel Casing	1.52	1-1/4 Minutes	None	For instructional purposes only, substitute standard measures approximately 1-1/2" in diameter by 9" long.	(ea.) 1.43
Bomb, Incendiary, 100-lb, M47	Incendiary Oil IM & NP	47	25 yards	1.1 lbs of Black Powder	Has cylindrical steel body approximately 8" diameter. Sheet steel box-type tail riveted to body. Approximately 48" in length.	(ea.) 15.00
Bomb, Incendiary, 100-lb, M47A2	Incendiary Oil IM & NP	47	25 yards	1.1 lbs of Black Powder	Substitute standard. Slightly heavier gage steel than the M47.	
Bomb, Smoke, WP, 100-lb	WP	94.84	over 25 yards	1.1 lbs of Black Powder	Intended primarily as smoke bomb. Has incendiary and casualty action as well. Ordnance item of issue.	
Bomb, Incendiary, 4-lb, AN-M50-A1	Hexagonal Cast Magnesium Alloy Body & Thermate Charge	0.80	5 to 7 Minutes	None	Used in 100-lb. and 500-lb. clusters. Has hollow sheet steel tail. 1-3/4" across flats x 21-1/2" long.	(ea.) 3.00

Nomenclature	Incendiary Smoke or Cml Material Used	Approx. Wt. of Filling (lbs)	Approx. Burning Time or Bursting Radius	Explosive Charge	Remarks	Price
Bomb, Incendiary, 4-lb, AN-M50X-A1	Hexagonal Cast Magnesium Alloy Body & Thermate Charge	0.47	5 to 7 Minutes	170 Grams of Black Powder	Used with AN-M50-A1 in 100 & 500-lb clusters. Differs from AN-50-A1 is that it has buster exploding 1-1/2 minutes after ignition of Thermit.	(ea.) \$ 3.00
Bomb, Incendiary, Magnesium, 2-lb, AN-M52	Hexagonal Cast Magnesium Alloy Body & Thermate Charge	0.51	5 Minutes	None	Used in 100-lb & 500-lb. clusters. Approximately 10" in. length x 1-3/4" across the flats. Has a hollow sheet steel tail.	(ea.) 2.00
Bomb, Incendiary, 4-lb, AN-54	Thermate Charge in a Cylindrical Steel Tubing	1.50	1-1/2 Minutes	None	Substitute standard. Used in 100-lb & 500-lb clusters. Approximately 1-5/8" diameter x 21-1/4" long.	(ea.) 2.50
Bomb, Incendiary, 4-lb, AN-M54X	Thermate Charge in a Cylindrical Steel Tubing	1.44	1-1/2 Minutes	170 Grams of Black Powder	Substitute standard. Used in 100 lb & 500 lb clusters with AN-M54. Has explosive charge like AN-M50XA1.	(ea.) 2.50
Bomb, Smoke, 10-lb, AN-M67	A Hexagonal Steel Casing Filled with WP.	6.17	Information Not Available	10 Grs of Blk or 8 Grs of EC Powder; Plus 1 Gr of Blk Powder in Fuze	Incendiary as well as smoke bomb used in 100-lb & 500-lb clusters. Approximately 2-1/8" across flats and 19-1/2" long.	(ea.) 3.25
Bomb, Incendiary Oil, 6-lb, AN-M69	Hexagonal Steel Casing, Incendiary Oil IM & NP	3.0	Information Not Available	10 Grams of Black Powder	Used in 100-lb & 500-lb clusters. Approx. 2-7/8" across flats and 19-1/2" long.	(ea.) 3.00

RESTRICTED

CHARACTERISTICS OF BOMB CLUSTERS

Nomenclature	Adapter	No. of Bombs	Type of Bombs	Price
Cluster, 100-lb, Incendiary Bomb, M1	Adapter, Cluster, 100-lb, (Incendiary Bomb) AN-M3	34	4-lb. AN-M50-A1 (28) AN-M50X-A1 (6)	\$102.00
Cluster, 500-lb, Incendiary Bomb, M1	Adapter, Cluster, 500-lb, (Incendiary Bomb) M1	128	4-lb. AN-M50-A1 (102) AN-M50X-A1 (26)	384.00
Cluster, 100-lb, Incendiary Bomb, M2	Adapter, Cluster, 100-lb, (Incendiary Bomb) AN-M3	34	4-lb. AN-M54 (28) AN-M54X (6)	85.00
Cluster, 500-lb, Incendiary Bomb, M2	Adapter, Cluster, 500-lb, (Incendiary Bomb) M1	128	4-lb. AN-M54 (102) AN-M54X (26)	320.00
Cluster, 100-lb, Incendiary Bomb, M3	Adapter, Cluster, 100-lb, (Incendiary Bomb) AN-M3	51	2-lb. AN-M52	102.00
Cluster, 500-lb, Incendiary Bomb, M3	Adapter, Cluster, 500-lb, (Incendiary Bomb) M3	192	2-lb. AN-M52	384.00
Cluster, 100-lb, Incendiary Oil Bomb, M4	Adapter, Cluster, 100-lb, (Incendiary Bomb) M4	14	6-lb. M69 Oil Bombs	42.00
Cluster, 500-lb, Incendiary Oil Bomb, M4	Adapter, Cluster, 500-lb, (Incendiary Bomb) M2	60	6-lb. M69 Oil Bombs	180.00
Cluster, 100-lb, Smoke Bomb, M5	Adapter, Cluster, 100-lb, (Incendiary Bomb) M4	14	10-lb. M67 Smoke Bomb	42.70
Cluster, 500-lb, Smoke Bomb, M5	Adapter, Cluster, 500-lb, (Incendiary Bomb) M2	60	10-lb. M67 Smoke Bomb	183.00

CHARACTERISTICS OF LIVENS PROJECTORS AND SET, ACCESSORIES, LIVENS PROJECTOR, M1

Name and Mark No.	Major Components	Remarks	Price
Projector, Livens, M1	Barrel, M1; Baseplate, M1; Cover, Muzzle, M1 (Barrel, M1, 37-1/2" long)	Used by Chemical Troops for heavy concentration of the desired agent at relatively close range.	\$ 31.31
Projector, Livens, M2	Barrel, M2; Baseplate, M2; Cover, Muzzle, M1 (Barrel, M2, 52" Long)	The chief difference between this projector and the Livens Projector, M1, is in the length and weight of the barrels, and structure of the baseplates. The M2 barrel is longer and heavier than the M1. The baseplate, M2, is round, whereas the baseplate, M1, is rectangular. A limited standard item.	34.68
Set, Accessories, M1, Livens Projector	Axe; 4 picks; 6 spades; 2 blasting machines; reel of firing wire; 1000 ft. wire, copper, No. 14; Chest, empty; cart of contents; range indicator; clinometer; circuit detector; 6 aiming stakes, taper roll; tape steel; tape tracing; tool roll complete.	This set is issued two per chemical weapon company.	229.00

CHARACTERISTICS OF GRENADES, POTS, AND CANDLES

Name	Type of Filling	Approx. Wt. of Filling (lbs)	Approx. Burning Time or Radius of Burst	Remarks	Price (ea.)
Candle, Gas Irritant, DM, M2.	Adamant	2.0	2 to 4 Min.	Ignited by pull-wire or by flash of electric squib.	\$17.40
Grenade, Smoke, Red, AN-M3	Red Smoke	0.33	2 Min.	Generates red smoke cloud visible for about 4 miles under normal conditions. Designed as emergency signal device in snow covered regions. Has double jacket and 3 side arms to prevent lighted grenade from sinking into snow.	
Grenade, Hand, Irritant, CN-DM, M6	Adamant & Chloracetophenone	0.617	25 to 40 Seconds	Cylindrical sheet metal can approx. 2-1/2" x 4-1/2" with igniting mechanism mounted on top. Full gas production reached 2 to 3 seconds after being thrown. Does not explode. Generates irritant CN-DM smoke.	(ea.) 1.56
Grenade, Hand, Tear CN, M7	Chloracetophenone	0.617	25 to 40 Seconds	Operation is the same as Grenade, Hand, Irritant (CN-DM) M6. Generates tear gas cloud	(ea.) 1.56
Grenade, Smoke, White, HC AN-M8	(HC) Smoke Mixture	1.95	2 Minutes	Similar in construction to M6 and M7 grenades. Vent openings on top of container only.	(ea.) 1.24

Name	Type of Filling	Approx. Wt. of Filling (lbs.)	Approx. Burning Time or Radius of Burst	Remarks	Price
Grenade, Incendiary AN-M14	Thermate	1.36	30 seconds	Same body style as M6, M7, M8	(ea.) \$ 1.03
Grenade, Smoke, Hand Propelled, WF, M15	White Smoke Phosphorus	0.36	20 yards	Bursting hand grenade. Burst will occur 4 seconds after lever is released.	
Grenade, Smoke, Colored, M16	Colored Smoke Charge	0.28 (Average)	2-1/2 Minutes	Available in 7 different smoke colors: violet, blue, green, yellow, orange, red and black. Body of Cont. same as M6, M7 or M8 Grenades.	(ea.) 2.00
Grenade, Frangible AW, M1	AC	0.83	- - - -		
Grenade, Frangible AW, M1	White Phosphorus & Benzine	1.5	- - - -		
Grenade, Frangible CNE, M1	Chloracetophenone Solution	1.56	- - - -		
Grenade, Frangible IM, M1	IM, Incendiary Oil	0.95	- - - -	Round pint glass bottle with chemical filling. Thrown by hand or by grenade projector now being developed. Designed especially as antitank munition. Igniter, Grenades, Frangible, M2, used with IM, Grenade, all others use Igniter, Grenade, Frangible, L.	
Grenade, Frangible M-1, M1	Lewisite	1.97	- - - -		
Grenade, Frangible FS, M1	FS, Smoke	1.98	- - - -		

Name	Type of Filling	Approx. Wt. of Filling (lbs)	Approx. Burning Time or Radius of Burst	Remarks	Price
Pot, Smoke, HC, M1	HC, Smoke Mixture, a dense, white nontoxic smoke	10.7 to 12.5 lbs.	6-1/2 Min.	Designed as training munition. Ignited by scratcher block or by flash of electric squib. Cylindrical steel container approx. 5-5/8" x 9-1/4".	(ea.) \$ 3.41
Pot, Smoke, Miniature, M1	HC, Smoke Mixture	1 lb. 10 oz. to 1 lb. 13 oz.	2 to 3 Min.	A rectangular sheet metal can 5-1/4" x 3-1/4" x 1-11/16". Used and ignition similar to Pot, Smoke, HC, M1	(ea.) 0.75
Pot, Smoke, Floating, HC, M4	HC, Smoke Mixture	27 lbs.	10 to 15 Min.	Sealed 5-gal. steel pail. Designed to float when placed in or dropped into water. May be used to screen landing operations, etc.	(ea.) 12.50
Pot, Tear Gas, CN, M1	Tear Gas	1 lb. 2 oz.	3 to 4 Min.	Cylindrical metal can 3-3/4" x 4-1/2". Formerly a training munition. Ignited by scratcher block or flash of electric squib.	(ea.) 3.50

RESTRICTED

CWS SHELLS

Shell, 4.2-Inch Chemical Mortar

The shell, 4.2-inch chemical mortar, M2, alternate, has the same fillings as the Standard M2 Shell, but the casing is constructed differently.

Nomenclature	Price (Each)	
	M2	M2 Alternate
Shell, 4.2-Inch Chemical Mortar	\$23.00	\$18.00
Shell, Gas Irritant, CNB, 4.2-In. Chemical Mortar	25.80	20.80
Shell, Gas Irritant, CNS, 4.2-In. Chemical Mortar	30.90	25.90
Shell, Gas, Nonpersistent, CG, 4.2-Inch Chemical Mortar	25.70	20.70
Shell, Gas, Persistent, H, 4.2-Inch Chemical Mortar	25.70	20.70
Shell, Gas, Persistent, L, 4.2-Inch Chemical Mortar		
Shell, Simulated H, 4.2-Inch Chemical Mortar	24.50	19.50
Shell, Smoke, FM, 4.2-Inch Chemical Mortar	26.85	21.85
Shell, Smoke, FS, 4.2-Inch Chemical Mortar	25.50	20.50
Shell, Smoke, WP, 4.2-Inch Chemical Mortar	26.10	21.10

The Shell, 4.2-inch chemical mortar, M3, is filled only with HE. The shell, 4.2-inch chemical mortar, M3, alternate, is the same as the standard M3 except for a different casing construction.

Nomenclature	M3	M3 Alternate
Shell, 4.2-Inch Chemical Mortar	\$22.00	\$17.00
Shell, 4.2-Inch Chemical Mortar (HE Filled)	26.40	21.40

Shell, Livens Projector

The standard M2 Livens Projector Shell has a capacity of 660 cubic inches. The M2A1 shell has a capacity of 716 cubic inches and is distinguished from the M2 by the continuous rounded curve at the ends which allows no projection of the outer shell body as is noticeable on the M2 shell.

Nomenclature	Price (Each)
	M2 and M2A1
Shell, Livens Projector	\$ 8.51
Shell, Gas, Nonpersistent, CG, Livens Projector	33.40
Shell, Smoke, FM, Livens Projector	31.15
Shell, Gas, Nonpersistent, Cl, Livens Projector	29.95
Shell, Smoke, FS, Livens Projector	33.20

CHARACTERISTICS OF OTHER CWS MUNITION

Name	Description	Use	Remarks	Price
Burster, Detonating Cord, Cml Land Mine M3	8 ft. length of detonating cord (explosive core enclosed in waterproofed textile covering, approx. 3/16" diameter.	Burster for cml land mine. Used by folding into bundle and placing under land mine.	Insensitive to flame, friction or shock. Requires a blasting cap or detonator in contact with explosive core to cause detonation.	(ea.) \$0.22
Bursting, Cml, Land Mine, M4	Cylindrical bronze tube (3/4" x 3-1/2") loaded with pressed explosive charge, contains small well for insertion of detonator.	Burster for chemical land mine.	Detonators and bursters are shipped separately and assembled in field.	(ea.) 0.20
Capsule, CN	Standard 00 size gelatine capsule filled with CN.	Used for trng. purposes in bldg. up concentration of tear gas in trng. gas chamber	One capsule volatilized for 1000 cu.ft. builds up effective CN concentration in training gas chamber.	(ea.) 0.05
Detonator No. 8, with 30" leads. (Hercules & Dupont	Commercial #8 detonator, with 30' lead wires.	Used when firing chemical land mine electrically.	Handle carefully. Heat or shock may cause detonation. Avoid holding deton. in hand. Do not carry with Burster, cml, land, mine, M14.	(ea.) 0.10
Detonator No. 8 with 6' leads	Commercial #8 Detonator with 6' lead wires.	Used on Set, Gas Ident. Deton., M1	(See Item Above)	
Deton. #4 with 5'	Commercial #4 Detonator	Used on airplane smoke tanks M10 and M33.	Has approx. one half the strength of the Detonator, M8.	

RESTRICTED

Name	Description	Use	Remarks	Price
Fuze	Commercial Safety Fuze, burning rate 40 seconds per foot. (White covering.)	For igniting or detonating various munitions	Shipped in 50 ft. coils	
Fuze and Detonator No. 8	18" standard safety fuze with a No. 8 Detonator attached at one end.	For firing chemical land mine with fuze.	Fuze is approx. 3/16" in diameter and burns at rate of 40 seconds per foot.	(ea.) \$0.08
Fuze, Tear Gas Pot, Electrical	12" length of safety fuze capped at each end with a crimped fit metal casing.	For firing tear gas pots in series.	Connected from match-head opening of one pot to special fuze opening in center of preceding pot.	(ea.) 0.15
Lighter, Fuze	Pull-wire type	To ignite safety fuze when detonating chemical land mine, etc.	Commercial fuze lighter.	
Mine, Land Chemical, One-Gal.	Commercial type 1-gal. can, 2-1/2" x 4-1/8" x 10-1/4" with carrying handle.	To disperse chemical agents. On explosion of M3 and M4 burster the mine effectively contaminates area about 25 yards in diameter.	Standard Fillings. Mustard gas; as simulated H; MR; simulated H.	(ea.) 0.97 (Less Filling)
Squib, electric	Commercial type electric squib; available in two types (A) closed, (B) flash vented. Both are equipped with 6 ft. lead wires.	Type (A) used for detonation; type (B) for ignition.	Either type is satisfactory for igniting Livens Projector, propellant charges.	(ea.) 0.08



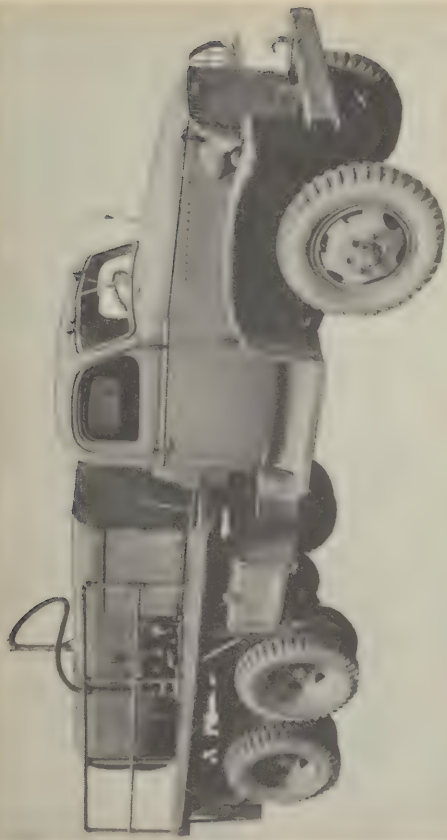
TAS 200 200 7

APPARATUS, DECONTAMINATING, HAND, 3-GALLON
PRESSURE TYPE, M1, FUNNEL, M2, AND PADDLE

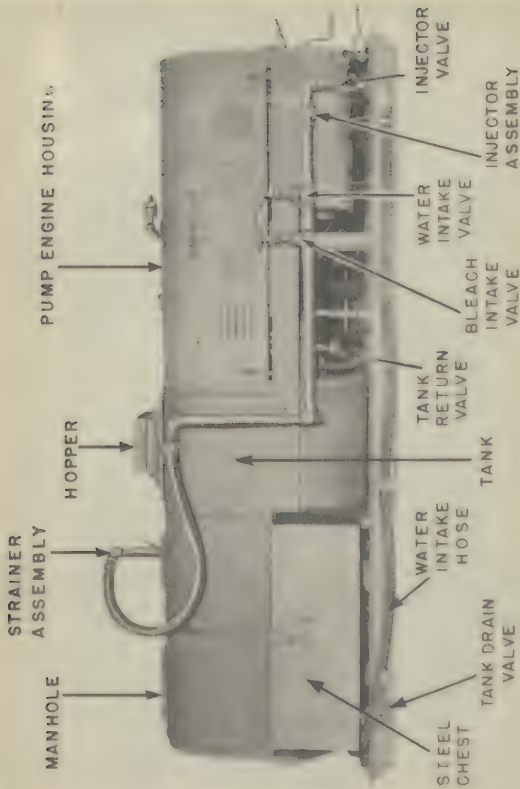


TAS-459

APPARATUS, DECONTAMINATING, HAND, 1-1/2-QUART CAPACITY, MS



APPARATUS, DECONTAMINATING, 400-GALLON, M3A1



APPARATUS, DECONTAMINATING, POWER DRIVEN, M4.

SECTION NO. 3

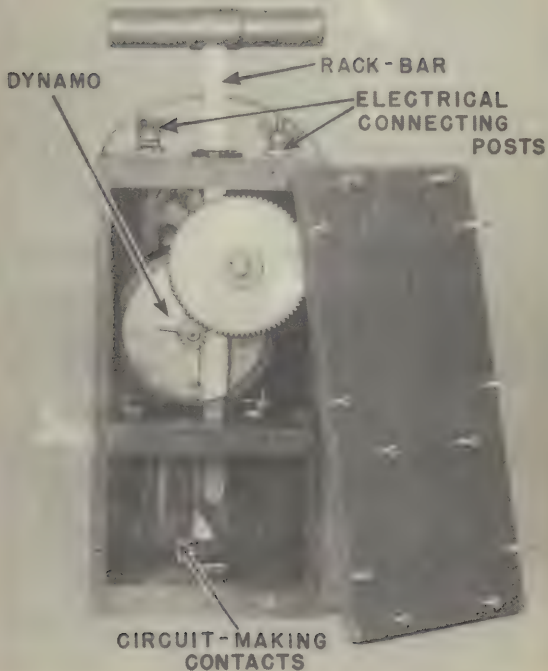
DECONTAMINATING AGENTS AND EQUIPMENT

Agent	Description	Price	Used As	Ingredients	Amounts	Parts By Weight	Area Covered	Apparatus Employed	Used To Decontaminate
Bleaching material, Grade B	Bleaching powder (chloride of lime) 35% available chlorine.	(lb) \$0.07	Dry mix	Agent	2 shovelfuls (10 lbs)	1 to 3	10 sq. yds.	Shovels and rakes	Shell holes, open ground, shoe soles, etc.
				Dirt	3 shovelfuls (30 lbs)				
Bleaching material, Grade BE (tropical type)	Stabilized bleaching powder. Similar to Grade B but more stable toward heat and BE mixture	(ea) 0.93	Paste	Agent	Mix to thickness of wall paper paste		1 sq. yd. by each lb. of agent in paste.	Shovels, brushes and pad-dies.	Buildings, walls, tires, rubber parts, etc.
				Water					
			Slurry	Agent	3 shovelfuls (15 lbs)	1 to 1	1 sq. yd. by each lb. of agent in slurry	3 gal. and 400-gal. decontaminating apparatus	Buildings, runways, areas not harmed by chloride of lime
Water									
Agent, Decon., Noncorrosive, M3	Stored in 2 gal. 2 Compartment container holding 2.5 lbs. of active powder plus 4.318 gal. of solvent (Acetylene tetrachloride)	(ea) 11.25	Solution of agent in acetylene tetrachloride	Active powder	3.8 lbs.	1 to 15	Up to 30 yds. by each gal. of mixture	All types of decontaminating apparatus	Surfaces, tools and instruments which would be harmed by chloride of lime

Agent	Description	Price	Used As	Ingre- dients	Amounts	Parts by Weight	Area Covered	Apparatus Employed	Used to Decon- tamine
Agent, Decon., M4	Substitute stan- dard. Stored in same type of con- tainer as agent Decon. Non-cor- rosive, M3	(ea) 9.86	Solution of agent in Acetylene Tetra- chloride	Solvent (Acety- lene Tetra- chloride)	4.318 gallons	1 to 15	Up to 30 yds. by each gal- lon of mix- ture	All types of decontam- inating ap- paratus	Surfaces, tools and in- struments which would be damaged by chloride of lime
Agent, Decon- taminating, Simulated M1A1	A standard white, fibrous, inert ma- teriel used in training to simu- late agent decon- taminating non- corrosive, M3 & M4 M1A1. Pack in 4-1/2 lb. paper bag.	pkg (ea) 0.04	Suspension of agent in water	Agent Water	3.8 lbs 4.318 gallons	1 to 5	Up to 30 yds by each gallon of mixture	All types of decontam- inating ap- paratus.	Used to simu- late decon- tamination, of surfaces, tools and in- struments.
Agent, Decon- taminating, M2	A limited stan- dard white, fi- brous, inert ma- teriel used in training to simu- late decontam- inating powder. M2 is packed in 50 lb sack.	pkg (ea) 0.93							Used the same as Bleaching Material, Grade F

CHARACTERISTICS OF DECONTAMINATING EQUIPMENT

Name and Mark Number	Material Made	Agent Used	Power For Operation	Remarks	Price
Apparatus, decontaminating, 3-gal., M1	Universal Metal Works. - Hudson Mfg. Co. - E. C. Brown Co.	Bleach or Agent, Decon., Noncorrosive, M3 or M4	Hand operated pump, storage pressure, valve type	See Supply Letter No. when ordering parts. Filler and funnel with strainer supplied with each apparatus. Portable type apparatus.	ea. \$ 3.35
Apparatus, decontaminating, 1-2 1/4 qt., M2	Hedger Co. Buffalo Pipe Corp. - Tyr-Pipe Co. - General Detroit Co.	Agent, Lecontaminating, Noncorrosive, M3 or M4	Hand operated pump	Filling funnel and hanger bracket supplied with each apparatus. See Supply Letter No. — when ordering parts. This app., is attached to all motor driven self propelled vehicles	ea. \$ 5.55
Apparatus, decontaminating, power-driven, M3A1	F. E. Myers & Bro. Co. - John Bear Mfg. Co. - "Friend" Mfg. Co. - A. E. Farquhar Co.	Bleach slurry	Truck, power-take-off-drive, pressure valve operated	When ordering repair parts, specify mark no., commercial make and commercial catalog part no.	ea. 3,500.00
Apparatus, decontaminating, power-driven, M4	Do	Do	Skid mounted, gasoline-engine driven, pressure valve operated.	Do	
Brush, decontaminating, M1		Bleach slurry Agent, decontaminating, noncorrosive, M3 or M4	Hand operated	5" dia. round, triple trust with 8-ft. detachable wooden handle	ea. 2.00



BLASTING MACHINE, 100 CAP



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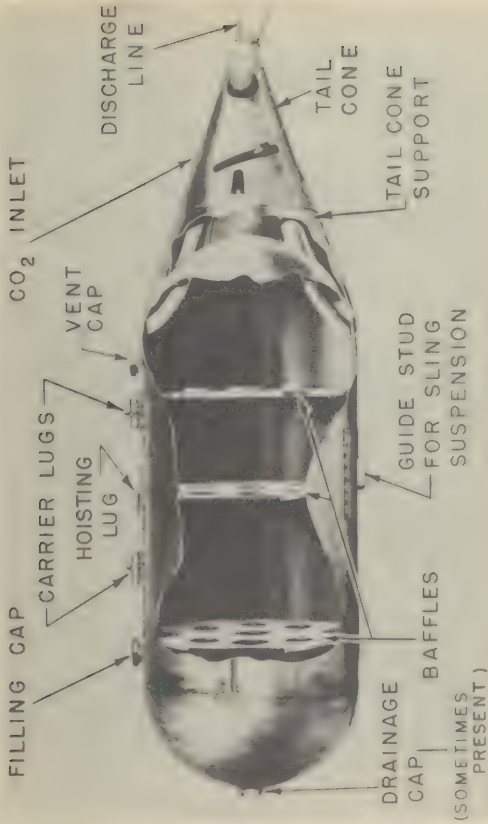
PUMP, AIRPLANE, SMOKE TANK, M2



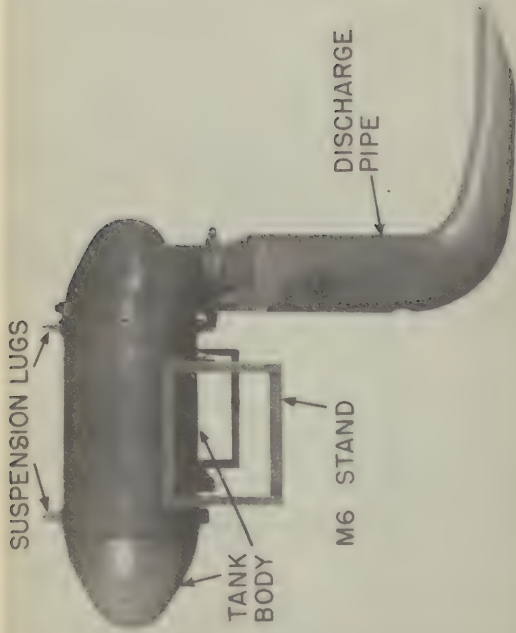
(A) STAND, CARRYING, M10 SMOKE TANK, M1; (B) TANK, SMOKE, AIR-PLANE, M10; (C) LINE, FILLING, M1; (D) STAND, LOADING, M1 (TRIPOD)



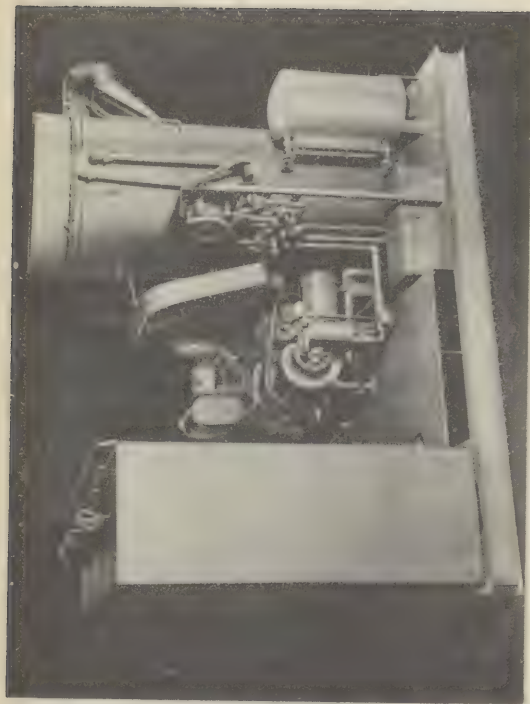
STAND, HOLDING, SMOKE TANK, M5



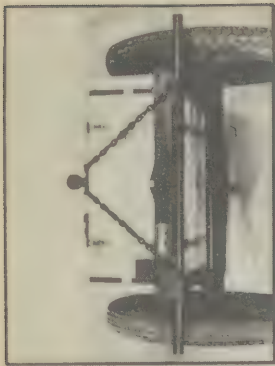
TANK, SMOKE, AIRPLANE, M20



TANK, SMOKE, AIRPLANE, M33.



GENERATOR, SMOKE, MECHANICAL, M1



CART, 4.2-INCH CHEMICAL MORTAR AND AMMUNITION

SHOCK ABSORBING
MECHANISM

TRAVERSING
MECHANISM

ELEVATING
SCREW

ELEVATING
WHEEL

STANDARD

BARREL

STRIKER PIN

BASEPLATE

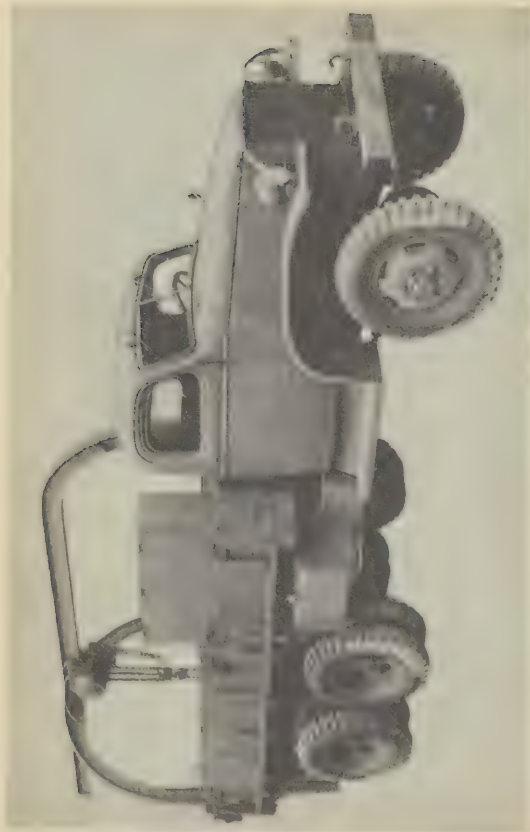
HANDLE
(SLIDING)

SHOCK
ABSORBING
MECHANISM

SPADE
CONNECTOR
RODS

TAD6-2674

MORTAR, CHEMICAL, 4.2-INCH, M1A1



CHEMICAL SERVICE TRUCK, M1

SECTION NO. 4

SPECIAL CHEMICAL TROOP EQUIPMENT

RESTRICTED

APPARATUS, CHARGING, PORTABLE CHEMICAL CYLINDER, M1

Price (ea.) \$44.80

Description. - This is a device for the transferring of a chemical agent to a portable chemical cylinder. It consists of: (1) a diaphragm valve and pressure gage; (2) a flexible tubing; (3) a gage, valve and pipe connections; (4) a cradle shaker; (5) a lever arm for attachment to the cradle.

BEAM GRAB, M1

Price (ea.) \$39.40

Description. - The Beam Grab, M1, is designed for lifting one-ton containers and is a component of the truck, chemical service, is contained in T/E's and T/BA's as a separate item. It is equipped with a hook for connecting to a crane or hoist.

BLASTING MACHINE, 100 CAP

Price (ea.) \$42.60

Description. - Plunger type machine used for firing all electrically fired chemical munitions. Functions on principle of ordinary generators. Designed as 100 cap capacity but under average field conditions not more than 14 squibs or detonators should be used. These must be wired in series. Store machine in dry place; handle carefully; don't expose to wet weather.

LABORATORY, FIELD, CHEMICAL WARFARE SERVICE, M1

Price (ea.) \$33,400.00

Description. - This is a complete set of equipment for a rear area, semi-fixed installation. Only one field laboratory is furnished per CWS Laboratory Company.

RESTRICTED

MECHANISM, VALVE REPLACEMENT, M1

Price (ea.) \$684.00

Description. - This mechanism consists of metal shield, socket assemblies, ball, rotor, two socket wrenches, two safety chains and two gauges (steel bars). The mechanism is used to replace the valves on filler containers. After use, the mechanism should be decontaminated, cleaned, coated with heavy grease and stored.

PLANT, IMPREGNATING, M1

Price (ea.) \$88,500.00

Description. - This is complete equipment for the installation of a semi-fixed impregnating plant. This plant is capable of impregnating large quantities of clothing by the solvent process, and is furnished only to C.W.S. Impregnating Companies.

PLANT, IMPREGNATING, M2

Price (ea.) \$40,000.00

Description. - In Impregnating Plant, M2, the impregnating is done with water instead of solvent. For a semi-permanent installation but about 1/2 the size of Plant Impregnating, M1.

STENCIL, INSIGNIA, CHEMICAL WARFARE SERVICE, LARGE

Price (ea.) \$4.25

Description. - This is a brass plate 11-3/8 inches long, 9-3/4 inches wide, .02 inches thick. The C.W.S. insignia, approximately 8-1/8 x 4 inches, is located in the center of the stencil. Company letters, 1-1/2 inches high, are placed 1/4" below the crossed-retorts of the insignia. The weight of the stencil is approximately 12-oz.

STENCIL, INSIGNIA, CHEMICAL WARFARE SERVICE, SMALL

Price (ea.) \$3.19

Description. - This is a brass plate, 6" x 6". The 4" x 2" crossed-retorts insignia of C.W.S. is located in the center. The company letters, 1" high, are located 1/8" below the crossed-retorts insignia. The weight of the stencil is approximately 4-oz.

CHARACTERISTICS OF AIRPLANE SMOKE TANK HANDLING EQUIPMENT

Name and Mark No.	Major Components	Use	Remarks	Price
Line, filling airplane smoke tank, M1	Hose; 2 valves; 3 ripples; elbow; nozzle; metal volume scale	Filling, AP smoke tank, M10	Gravity line that connects to 55-gal. drum or one ton containers by means of adapters. Limited standard item. Component of truck chemical service, M1	(ea) \$33.80
Line, filling chemical spray tank, M2	Hose; 2 gate valves; nozzle with gauge attached.	Filling, AP smoke tanks, M10, M20, M20A1, M21, M21A1	Connects to containers, with adapters gravity type line. Limited standard item. Component of truck chemical service, M1	(ea) 23.40
Line, filling airplane smoke tank, M3	Hose; 2 gate valves; nozzle with gauge attached; 4 detachable adapters and connections.	Filling all AP smoke tanks.	Gravity type line, connects to containers by means of adapters. Specified nozzle gauge for each type of tank. Standard item.	(ea)
Pump, airplane, smoke tank, M2	(1) A line filling cam pump, app. consisting of gate valve; vent hose; filling hose; nozzle and connections (2) a pump for force feeding.	Used for filling AP smoke tanks by means of hand rotary pump.	This line is designed to transfer chemicals from containers to smoke tanks without fumes escaping. Substitute item.	(ea)

CHARACTERISTICS OF AIRPLANE SMOKE TANK HANDLING EQUIPMENT

Name and Mark No.	Major Components	Use	Remarks	Price
Stand, carrying, AP smoke tank, M1	4 legs; 2 hinge pins; 4 tubular braces; support straps.	Prevents the M10 tank from rocking while being carried.	Hand stand for carrying the M10 airplane smoke tank. Standard item.	(ea) \$19.30
Stand, holding AP smoke tank, M5	4 triangular legs; 2 bases; 4 braces.	To prevent rocking of tank while filling or carrying.	"V" type metal stand used with AP smoke tanks M20, M20A1, M21, M21A1. Standard item.	(ea) 2.92
Stand, loading AP smoke tank, M1	3 legs; hinges; braces; chain, hoist.	To load chemical smoke tanks to airplanes.	This is a tripod, 1-1/2-ton loading stand, hand operated. Supplied only as a component of truck chemical service, M1	(ea)
Truck, tank, hand, M1	Frame; cross bar; wheels; superstructure; grab hooks.	To transport airplane smoke tanks.	Hand push or pull iron wheel cart used to carry the airplane smoke tanks M20, M20A1, M21, M21A1. Standard item.	(ea) 45.10

CHARACTERISTICS OF AIRPLANE SMOKE TANKS

Name and Mark No.	Type Of Tank	Method Of Discharge	Maximum Capacity & Wt. Empty	Remarks	Price
Tank, smoke, Airplane, M10	Wing type, spray tank	Gravity straight exhaust	33-gal. 68-lbs.	Used on A-20A, A-20B, A-26, may be carried on any airplane which has wing stressed to carry the weight, such as the A-35. Has sealed air vent and exhaust pipe that are opened by electric detonators. Standard item.	ea. \$56.60
Tank, smoke, Airplane, M20	Fuselage, slip stream.	Internal pressure valve, straight exhaust	50-gal. 190-lbs.	Designed for 1000-lb bomb station. Any pursuit plane which carries a bomb or belly fuel tank can be adapted to carry the M20 tank. Pressure is supplied by CO ₂ cylinder in the plane. Discharge may be continuous or at intervals. Standard item.	ea. 221.00
Tank, Smoke, Airplane, M21	Do	Do	30-gal. 141-lbs.	Designed to be carried on a 500-lb. bomb station, otherwise similar to the airplane smoke tank, M20. Both the M20 and the M21 may be carried inside the bomb bay with special attachments for discharge pipe.	ea. 225.00
Tank, smoke, Airplane, M33	Bomb bay	Gravity elbow exhaust	70-gal. B-17 - 200 lbs. B-24 - 220 lbs. B-25 - 200 lbs. B-26 - 215 lbs.	Designed to be carried on 2000-lb. bomb station. Discharge elbow pipe contains air vent. Seals of air vent and discharge pipe are broken by electric detonators. Special discharge pipe elbow is used with B24 and B26. Four tanks are carried on B24, two on B17 and B26, one on B25. A special wrench is supplied with each tank. Asbestos jacket and ice shield is supplied if tank is to be used under conditions that require them. Standard item.	ea. 80.00

CHARACTERISTICS OF SMOKE GENERATORS

Name and Mark No.	Type and How Operated	Major Component Assemblies	Remarks	Price
Generator, oil smoke, M1 (Stationary)	Stove burner type draft operated	1st, pot cover, stack, draft shield, stack cap, draft pipe	For rear area installation. Operated in pairs, each generator located a few yards apart. One can be operated while the other is being serviced. Standard item.	(ea) \$16.00
Generator, smoke, vehicular type, M1	Exhaust oil smoke type, pressure pump operated from spark plug adapter or electric motor.	Oil tank, control panel, nozzle, spray plate, filter, tubing pipe cross, filling plug.	May be attached to any motor vehicle. Designed for use of mobile equipment. Limited standard.	(ea) 34.50
Generator, smoke, mechanical M1 (100-Gallon)	Fog type, gasoline engine operated.	Base, engine, tanks. Fuel and water lines and connections, burner, furnace, nozzle, coils, control panel and other mechanical equipment.	Mounted on Airforce Trailer and issued to smoke generator companies only. Standard item.	(ea)

CHARACTERISTICS OF 4.2-INCH CHEMICAL MORTARS AND EQUIPMENT

Name and Mark No.	Major Components	Remarks	Price
Cart, 4.2-inch chemical mortar, M1A1	2 wheels, frame, chains, rack	This is a two wheel pneumatic tire cart that is equipped to carry the M1A1 and M2 Chemical Mortars and set accessories. The mortar is held on the rack by adjustable chains. Limited standard item.	(ea) \$248.00
Cart, 4.2-inch chemical mortar ammunition, M1A1	2 wheels, frame, adjustable chains	This is essentially the same cart as the cart, 4.2-inch chemical mortar, M1A1, less the mortar rack. It is used to carry ammunition. Limited standard item.	(ea) 237.00
Cart, 4.2-inch chemical mortar and ammunition, M1A1	2 wheels, frame, adjustable chains, removable rack.	This cart is used to carry the M1A1 or the M2 chemical mortars and set accessories. It may be converted to an ammunition cart by removing the rack and adding six lengths to the adjustable chains. Standard item.	(ea) 248.00
Indicator, range 4.2" chemical mortar, M1	White ivory card of plastic material approx. size 5-1/4" x 3-1/4" x 1/16".	This is used to obtain proper angles, elevations and propelling charges. The range table is printed on both sides of the card. Standard item.	(ea) No cost.

CHARACTERISTICS OF 4.2-INCH CHEMICAL MORTARS AND EQUIPMENT

Name and Mark No.	Major Components	Remarks	Price
Mortar, chemical 4.2", M1A1	Barrel, M1A1 or Barrel, M2 (Unimproved); Base plate, M2 (Unimproved); Standard, M1; Sight, M2.	This is a surface-set-up type chemical mortar and is issued to chemical mortar companies. Substitute item.	(ea) \$305.00
Mortar, chemical 4.2-inch, M2	Barrel, M2 (Improved); Base plate, M2 (Improved); Standard, M1, Sight, M2	The essential difference between this chemical mortar and the chemical mortar M1A1 is that the barrel of the M2 is designed for increased range of fire. Standard item.	(ea) \$63.00
Rule, Mil, 4.2" chemical mortar, M1	Body	This rule is graduated in units of 10 mils, up to 100 mils, on both sides of the zero, which is the center. It is used to estimate deflections of fire. Standard item.	(ea) .53
Set, accessories, 4.2-inch chemical mortar and ammunition cart, M1A1	Set of tools, fire iron, hand tire pump, box	One set is supplied with each cart, 4.2-inch chemical mortar, M1A1 ammunition cart, M1A1, mortar and ammunition, M1A1. Standard item.	(ea) 10.40
Set, accessories, and spare parts for 4.2-inch chemical mortars, M1A1 and M2.	Gunner's tool roll and contents, ammunition tool roll and tools, spare parts needed for operations and second echelon repairs.	This chest is issued for the servicing and maintenance of the chemical mortar. Standard item.	(ea) 115.00

CHARACTERISTICS OF ADAPTERS AND VALVES FOR C.W.S. EQUIPMENT

Name and Mark No.	Type	Use	Remarks	Price
Adapter, filling for $\frac{3}{4}$ " Chlorine Institute valve type A-ton container.	Type A-ton container	For $\frac{3}{4}$ " Chlorine Institute valve.	Reducing elbow adapter that connects the line filling to angle valve on ton container type A, component of adapter, line filling one-ton container, M1.	(ea) \$1.80
Adapter, filling, for Type D ton container valve.	Type D-ton container.	For filling connection on type D-ton container.	$\frac{3}{4}$ " x 30° straight elbow that is used on angle valve on one ton container, Type D. Component of adapter, line filling, one-ton container, M1.	(ea) 25.30
Adapter, line filling, 1-ton container, M1	Type A & D-ton container.	Filling connections on one-ton containers.	Valves, nipples, elbows, tees, adapters, connections for filling one-ton containers components of "Truck, Chemical Service, M1." Standard item.	(ea) 25.30
Valve, $\frac{3}{4}$ "	Commercial type	For chlorine cylinder and type A-ton container.	Meets specifications prescribed by Chlorine Institute. Used on 25-lb., 50-lb., 75-lb., cylinders and 1-ton container, Type A.	(ea) 1.35
Valve, discharge, $\frac{3}{4}$ " ton container	Chlorine Institute Drawing #12-30-H	Used on Type A-ton container.	Is not used on the Type D container.	(ea) 1.50
Valve, gas, toxic, M1, Liberty	Commercial type	Used on 1-ton steel container.	Shank is threaded on inside and outside for assembling with an education pipe. Formerly used with portable chemical cylinder.	(ea) 2.75

RESTRICTED

CHARACTERISTICS OF ADAPTERS AND VALVES FOR C.W.S. EQUIPMENT

Name and Mark No.	Type	Use	Remarks	Price
Valve, gas toxic M2 liberty	Commercial type	Used on 1-ton steel container.	Differs from M1 valve in that shank of M2 valve is threaded only on inside.	(ea) \$ 2.75
Valve, phosgene	Do	Used on 150-lb steel cylinder		(ea) 8.50
Valve, angle	C. W. S.	Used as discharge valve on 1-ton container, Type D	Similar in structure to 3/4" Chlorine Institute valve but used for storage of H and L in. type D-ton containers.	(ea)

CHARACTERISTICS OF WRENCHES FOR C.W.S. EQUIPMENT

Name and Mark No.	Type	Use	Remarks	Price
Wrench, offset opening, 1-19/64 inches	Commercial type offset at head 1-1/8"	For use on liberty valve	This was formerly called "Wrench, 3/4" offset, for liberty valves"	\$0.85 (ea)
Wrench, single head, milled opening, 1-1/4 inches	Commercial type check nut, 150 angle	Do	This item was formerly called "Wrench, 3/4", open end, for Liberty valves.	(ea) 0.50
Wrench, socket opening, 41/64 inch	Special C.W.S. type	On one-ton container pipe plug	Socket of this wrench is a straight pattern with pin handle broached opening.	(ea) 0.85
Wrench, valve opening	Box type opening, 3/8"	Use on angle valve of one-ton container, Type D	Carbon steel box type wrench used to open and close valve on one-ton container, Type D	(ea) 0.44
Wrench, valve removing, M1	Special	Used in replacing angle valve on Type D ton container	Especially designed for use in replacing valve, standard item.	(ea) 17.25
Wrench, Valve removing, M2	Special	Used in replacing valve on one ton container, Type A	Same as Wrench, Valve Removing, M1, except that it applies to one-ton container, Type A. Standard item.	(ea) 17.25

CHARACTERISTICS OF SPECIAL TRACTORS, TRUCKS, TRAILERS

Name and Mark No.	Major Component Assemblies	Primary Use	Remarks	Price
Tractor, Crane, M1	Commercial type tractor, boom, drum, boom hoist mechanism, power-take off-clutch drive	For handling C.W.S. bulk equipment.	Half or full circle swing 12' to 18' adjustable boom, 4000-lb. lift, 10 ft clearance at 6' in front of axle. Standard item.	(ea) \$4700.00
Trailer, chemical handling, M2	Basic trailer, universal chocks, supports, movable angle.	Transportation of airplane smoke tanks and bulk chemicals.	4-wheel, flat bed type commercial trailer. Supports its loaded weight while parked or in tow. Standard item.	(ea) 1140.00
Trailer, chemical service, M1	Chassis, bed superstructure, hoist, sling parking legs.	Designed for transportation and handling chemical agents in steel drums.	Similar to trailer chemical handling, M2, with the one exception the M1, has a superstructure. Standard item.	(ea) 1360.00
Truck, chemical service, M1	Vehicle mount, superstructure and overhead trolley crane, container chock, chemical handling, equipment decon. supplies, access and tools, etc.	For handling bulk chemical containers and for handling and servicing airplane smoke tank.	Equipped with 1-1/2-ton commercial chain hoist for handling bulk chemical. Standard item.	(ea) 4080.00
Truck, crane, swinging boom, M1	Crane, outriggers & jacks hoist, topping winch, swinging mech. nigger-heads, tools & spare parts, instr. book, body, basic truck	For handling bulk chemicals in ton containers.	This is a telescopic boom motor truck crane, mounted on a 4-ton, 6x6, truck with cab. It has a long lift of 3600 lbs, is equipped with a power-take-off-drive. It is issued to a depot and chemical depot companies. Standard item.	(ea) 9200.00

RESTRICTED

SET, EQUIPMENT, MAINTENANCE AND REPAIR, M1

Price \$4,960.00

Description. - This set is issued to chemical maintenance companies only and consists of three subsets:

1. Set, Gas Mask, Repair

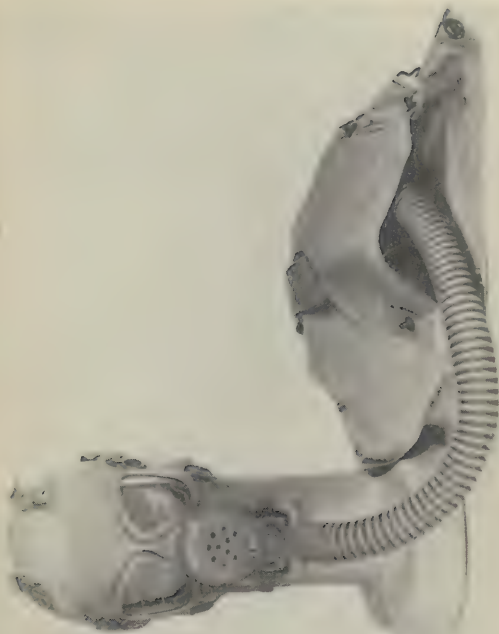
This set contains all the necessary equipment to make hand and machine repairs to the gas mask, equipped with its own power generator plant.

2. Set, Equipment, Repair

This set contains all the tools and machines necessary to make repairs to Chemical Warfare Service weapons and equipment other than the gas mask.

3. Set, Salvage

This set contains all the equipment needed for the salvaging operations of Chemical Warfare Service material.



MASK, GAS, DIAPHRAGM, M3A1.



MASK, GAS, NONCOMBATANT



OPTICAL GAS MASK M1-1-5



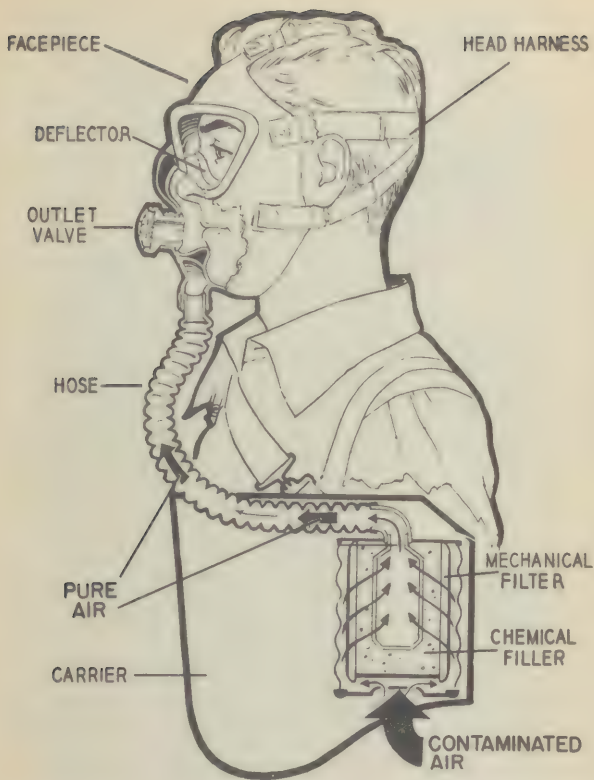
MASK, GAS, SERVICE, M2A2.



MASK, GAS, SERVICE, LIGHT-WEIGHT, M3-10-2.



MASK, GAS, TRAINING.



MASK, GAS, SERVICE, SECTIONAL VIEW SHOWING AIR FLOW SYSTEM



- A. Diaphragm, Plastic Type, with Acushnet Type Outlet Valve.
B. Diaphragm, Metallic Type, with Outlet Valve, M6.
C. Outlet Valve, M1.
D. Outlet Valve, MV, Connell Type.
E and F. Outlet Valve and Case, M8.



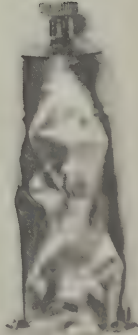
KIT, REPAIR, GAS MASK, UNIVERSAL, M3

GAS MASK REPAIR KIT, COMPANY, MII

DIRECTIONS

1. REMOVE ALL OLD STRAPPING.
2. THOROUGHLY CLEAN PLACES TO BE PATCHED WITH BENZOL OR GASOLINE.
3. APPLY COAT OF RUBBER CEMENT WITH FINGER TIP. SET ASIDE UNTIL NEARLY DRY.
4. PUT ON STRAPPING AND SMOOTH EVENLY.
5. BE SURE THAT ALL JOINTS ARE WELL LAPPED TO PREVENT GAS LEAKAGE.

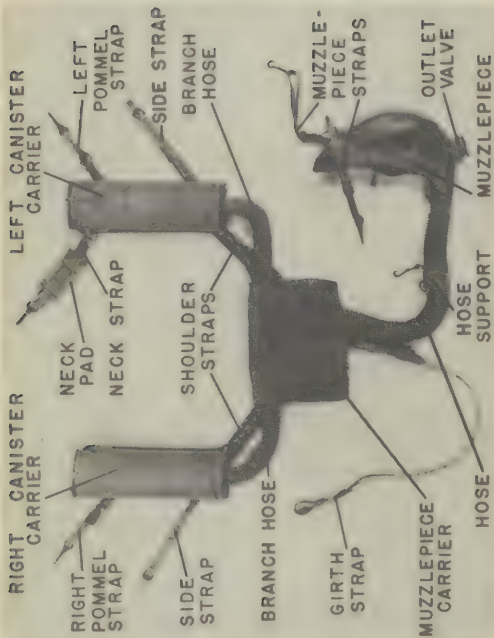
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KIT, REPAIR, GAS MASK, COMPANY, MII



RESPIRATOR, DUST, M2



TAF-31204

MASK, GAS, HORSE, M4

SECTION NO. 5

INDIVIDUAL PROTECTION

CHARACTERISTICS OF THE GAS MASK

Description. - The following listed masks are completed masks with normal components. Each nomenclature carries 3 numbers. First number designates the facepiece; second number, the canister and the third number the carrier. Masks however, may be made up of other than normal components. See charts on major assemblies for interchangeability.

NOMENCLATURE	PRICE
Mask, Gas, Diaphragm, M3-IXA1-IVA1	\$ 7.90
Mask, Gas, Diaphragm, M3A1-IXA1-IVA1	8.20
Mask, Gas, Noncombatant, MI-I-I	2.50
Mask, Gas, Noncombatant, MIA1-I-I	
Mask, Gas, Noncombatant, MIA2-I-I	2.60
Mask, Gas, Optical, M1-1-5	10.70
Mask, Gas, Service, MIA1-IXA1-IVA1	7.64
Mask, Gas, Service, M2A1-IXA1-IVA1	5.84
Mask, Gas, Service, M2A2-IXA1-IVA1	5.92
Mask, Gas, Service, Lightweight M3-10-6	6.00
Mask, Gas, Training, M2A1-1-1	3.50
Mask, Gas, Training, M2A2-1-1	4.04

CARE OF THE GAS MASK

1. Keep mask in cool dry place out of direct sunlight when not worn.
2. Dry mask and carrier after use.
3. Keep mask properly seated in carrier when not in use.
4. Do not place mask where it will be damaged by blows or heavy weights.
5. Check mask for defects and fit frequently.
6. If used often, disinfect under supervision, periodically.
7. Avoid contact of rubber parts with gas or oil.

CHARACTERISTICS OF GAS MASK FACEPIECE ASSEMBLIES

Name and Mark No.	Eyepieces	Outlet Valve	Facepiece Material	Size	Headharness
Diaphragm, MIA1	Screwed-on Removable Binder Rings, safety glass lens	Flap type valve with guard attached to lower portion of angletube uses valve, MII	Stockinette covered rubber, sewed chin seam	1-4	MII or MIIA1, six strap headharness, cloth head pad with the six buckles on the facepiece.
Diaphragm, MII	Do	Flap type valve without guard, in front of diaphragm uses valve, MII.	Do	Universal	Do
Diaphragm, M3	Transparent plastic curved lenses crimped on eyepieces.	MVI spearhead, flap type rubber valve, metal guard.	Fully molded rubber faceblank without a chin seam	Universal	MII or MIIA1 six strap headharness, cloth head pad with six buckles on facepiece.
Diaphragm, M3A1	Do	Acushnet type, Plastic Guard attached to diaphragm angletube.	Do	Universal	Do
Noncombatant, M1	Plastic sheet sewed in faceblank	MVII Acushnet type outlet valve on side of facepiece	Fabric faceblank with adhesive treated chin seam	Large Med. Small Adult Child	M4, No headpiece or crosspiece, buckles on facepiece, adult size, child size.
Noncombatant, MIA1	Plastic sheet cemented to faceblank	MVII Acushnet type outlet, valve on side of facepiece	Sheet Rubber	Large Med. Small Adult Child	Do

Name and Mark No.	Eyepieces	Outlet Valve	Facepiece Material	Size	Headharness
Non-combatant, M1A2	Do	Do	Rubber coated cloth.	Do	Do
Optical, M1	Plate glass, special lens	MVI speakerhead, flap type, rubber. Metal guard	Fully molded rubber face blank without a chin piece.	Universal	M1 head harness, 6-straps, no sub-strap, rectangular pad.
Service, M1A1	Safety Glass lens screwed on circular eyepiece.	Connell type, M1	Acetate covered rubber, sewed chin seam	1-4	M11 or M1A1 six-strap head harness, pentagonal cloth head pad with 6 buckles on facepiece.
Service, M1A2	Do	Do	Do	Universal	The lower cheek tab is sewed in 2 places on facepiece. On M1A1 this tab is sewed only in one place.
Service and Training, M1A1	Plastic or glass lenses, original eyerings	Connell type, MV plastic guard connected at right angle to nozzle	Fully molded rubber face blank	Universal	M1A1 head harness
Service and Training, M1A2	Do	M- A submer type plastic case and guard, cemented to face blank	Do	Small Universal Large	M4 head harness
Service, M3	Plastic or glass lenses in eyepieces	M- A submer type rubber disc, plastic case.	Molded rubber face blank	Small, Universal Large	M1A1 or M7 head harness. M7 head harness has 6-straps, a double triangular cloth head pad, with buckles on the facepiece.

RESTRICTED CHARACTERISTICS OF GAS MASK CARRIERS

Name and Mark No.	Shape	Remarks
Service MIII & Diaphragm	Irregular hexagonal envelope type. Tuck in fabric below canister to allow ready access of air to inlet valve. Shoulder and body straps.	Suitable for use with service and diaphragm, gas mask having canisters with valve in top. For side carrying.
Service MIIIA1 & Diaphragm	Same as the MIII, except that the lower lobe has a semi-hexagonal container, instead of a semi-circular as in MIII.	Used with MVIII canister. For side carrying.
Service, MIV & Diaphragm	Same as MIIIA1, except slightly smaller to fit MIX and MIXA1 canisters.	Cannot be used with MVIII and earlier canister. For side carrying.
Service, MIVA1 & Diaphragm	Distinguished from the MIV by a 4-inch longer waist strap and reinforced inside body. Snap fastener attached to fastener straps.	Use the same as MIV.
Service, M6	Rectangular, 10" x 5" x 13-1/2", 3 pockets with shoulder strap and body strap.	Suitable for the light-weight service mask with M10 canister only. May be carried in three positions on the body.
Optical, M5	Rectangular, 7-1/2" x 6-1/2" x 9". Shoulder straps only.	For use only with optical gas mask.
Training, M1	Inverted frustrum of a cone, shoulder strap and body rope.	Suitable for all training masks or non-combatant masks.

CHARACTERISTICS OF GAS MASK CANISTERS

Name and Mark No.	Type of Body	Color	Dimensions	Valve-type Size-position	Remarks	Price Each
Canister, service, MIV (See Note 1)	Rectangular, corrugated body, nozzle elbow attached.	Olive drab	7" x 4-5/8" x 3"	Disc, inlet valve in bottom, 1-1/2" diameter.	Suitable for the MIV and MIVA1 carriers.	
Canister, service, MVIII (See Note 1)	Do	Do	Do	Disc, inlet valve in bottom, 2" diameter.	Do	
Canister, service, MIX (See Note 1)	Rectangular, smooth body, nozzle elbow attached.	Do	6-1/2" x 4-5/8" x 3"	No valve, circular opening in bottom 1-3/8" diameter.	Do	
Canister, service, MIXA1 (See Note 1)	Rectangular, corrugated body, nozzle elbow attached.	Do	Do	Disc, inlet valve in bottom, 2" diameter.	Do	
Canister, service, MIXA2 (See Note 1)	Do	Olive drab body, yellow top	Do	Do	Do	
Canister, service, M10	Cylindrical smooth surface, straight nozzle for attaching hose.	Olive drab2	3-7/16" dia. 5-1/2" high	Do	Used with the M6 carrier only.	

RESTRICTED

Name and Mark No.	Type of Body	Color	Dimensions	Valve-type Size-position	Remarks	Price Each
Canister, training, M1	Cylindrical smooth surface, straight nozzle for attaching hose.	Olive drab	3" dia. x 5-3/8" high	Disc inlet valve in bottom, 2" diameter.	Used on training mask, MI, or non-combatant mask and MI carrier.	
Canister, optical, M1	Cylindrical, has nozzles and inlet valves on both ends	Do	5-1/2" long x 2-15/16" diameter.	Inlet is a slit along the side of the canister, valves in each nozzle.	Used with the M5 carrier only	
Canister, acid vapor, MI	Rectangular shape	All white	7-1/2" x 4-3/4" x 3-1/4"	Rubber disc, inlet valve in bottom.	Interchangeable on all service and diaphragm masks (See Note 2)	(ea) \$5.50
Canister, All purpose, M1	Do	All red	Do	Do	Do (See Note 2)	(ea) \$6.70
Canister, Ammonia, M1	Do	All green	Do	Do	Do (See Note 2)	(ea) \$6.35
Canister, HCN, MI	Do	White top, yellow can	Do	Do	Do (See Note 2)	(ea) \$6.00
Canister, oil, vapor MI	Do	All black	Do	Do	Do (See Note 2)	(ea) \$4.50

RESTRICTED

Name and Mark No.	Type of Body	Color	Dimensions	Valve-type Size-position	Remarks	Price Each
Canister, non-combat- ant, MI	Cylindrical	Olive drab	3" dia. x 5-3/8" high	Do	Has no nozzle, face form fastens around can.	

Note 1 - For use also with diaphragm mask.

Note 2 - If used with the "Lightweight" service mask facepiece, M3,
hose MI or MII and carrier MIV or MIVA 1 must be used.

CHARACTERISTICS OF GAS MASK HOSE

Name and Mark No.	Material	Dimensions	Remarks	Price
Hose, M1	Corrugated stock-inette covered rubber.	27" long x 1-1/2" O.D.	This hose normal component of mask gas, service, M1A2-IXA1-IVA1 and service M1A1-IXA1-IVA1 used as a substitute for hose M11.	-----
Hose, M11	Corrugated, warm drab molded rubber.	Do	This hose may be used on all diaphragm and service masks except the service M3-10-6.	-----
Hose, M111	Do	18" long x 1-1/2" O.D.	This hose is used only on the Service M3-10-6	-----
Hose, elbow	Do	10-5/8" long to center of elbow.	Two of these hose elbows are used on the optical M1-I-1.	-----

Name and Mark No.	Chief components Materials	Use	Remarks	Price
Disinfectant, gas, mask, M1	Round, 4-oz. bottle amine-chloride solution.	Periodic disinfecting of gas mask	The commercial name of this disinfectant is "Roccal." Two tablespoonfuls of the solution are mixed with a gallon of water and sponged on the mask.	(ea) \$0.17
Formaldehyde	37% or 40% solution of formaldehyde gas in water may contain 20% wood alcohol as impurity.	Used as a substitute for disinfectant, gas mask. M1.	No fire hazard. Extremely irritating to skin and mucous membranes. Keep containers tightly stoppered.	(ea) \$0.08
Impregnate shoe, M1	Soft yellow grease. Like paste, 8-oz. can.	To make shoes resistant to liquid vesicants.	Directions for using are printed on the label.	(ea) \$0.12
Kit, gas mask, waterproofing, M1	Canvas case, 12 sheets of waterproofed adhesive plaster, instructional card, two clamps, roll of waterproofed adhesive plaster.	To waterproof canister of gas mask.	Waterproofed adhesive sheets and plaster used to seal inlet valve opening and all seams of the canister. Clamps used to seal hose without detaching it from canister.	(ea) \$0.75
Kit, repair, gas mask, company, MII	Fiber case, roll of tape, tube of cement.	To repair facepieces	This is a small cylindrical fiber case, 5-1/4" x 2" dia. That contains materials for minor repairs to facepieces.	(ea) \$0.26
Kit, repair, gas mask, universal, M8	Canvas tool roll: TM 3-205; hammer; die button holder tool; lens wrench; shears; pliers; screwdriver; tool set No. 9935; punch; sewing kit.	Use for hand repairing of gas mask.	Used by Second Echelon for field repairs to gas mask and assembling and disassembling gas mask.	(ea) \$5.44

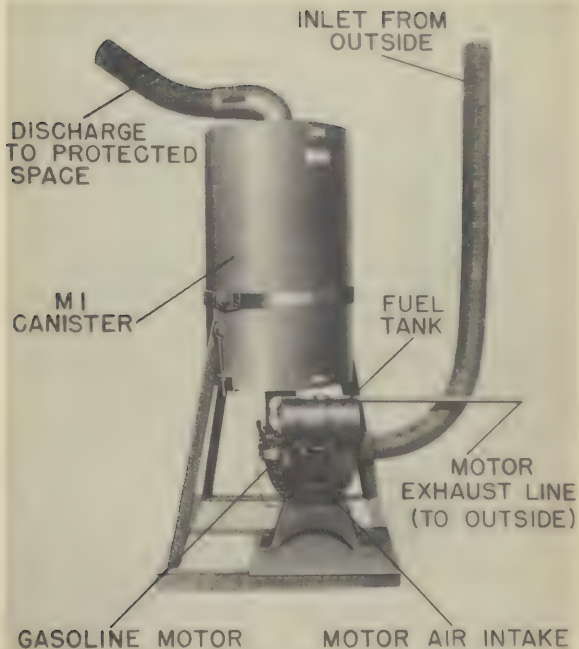
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Name and Mark No.	Chief components, Materials	Use	Remarks	Price
Ointment, protective, M2	Pale yellowish grease-like material in a collapsible tube.	First aid measure after exposure to vesicants.	Packed in individual fiber container with directions for use printed on each tube.	(ea) \$0.30
Ointment, protective, M3	Do	Do	Differs from protective, ointment, M2, only in chemical contents.	(ea) \$0.30
Ointment, protective, M4	Do	Do	Differs in chemical contents from protective ointment, M2 and M3, for jungle use, tube and 4 paper swabs are packed in waterproofed fiber container. Formerly known as ointment protective, M1.	(ea) \$0.30
Respirator, dust, M1	Faceblank with head harness. Inlet and outlet valves are of the acushnet type.	Protects against dust, sand and dirt.	Does not protect against war gases or irritant smokes.	(ea) \$1.04
Respirator, dust, M2	Rubber face ring, felt cloth filter; acushnet type outlet valve; head harness.	Do	Felt filter is cemented and sewed to face ring and is washable. Head harness is replaceable. Affords no protection against war gases or irritant smokes.	(ea) \$0.65
Set, antidim MI	Cylindrical metal can, approximately 1-1/4" in diameter x 2-1/2" high. Contains a piece of treated cotton cloth.	To clean lens of gas mask, to prevent fogging.	Cotton cloth, 6" x 10", is treated with aerosol-o-t. Formerly this item consisted of stick of antidim and cloth.	(ea) \$0.04

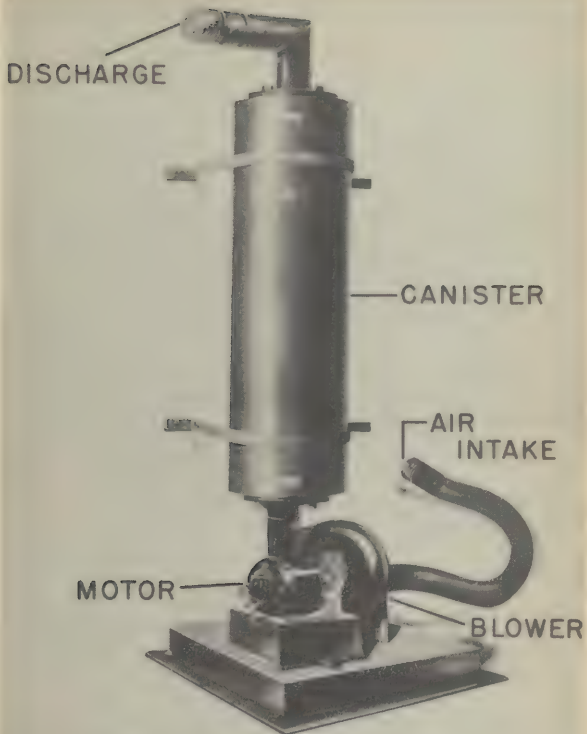
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CHARACTERISTICS OF HORSE GAS MASK

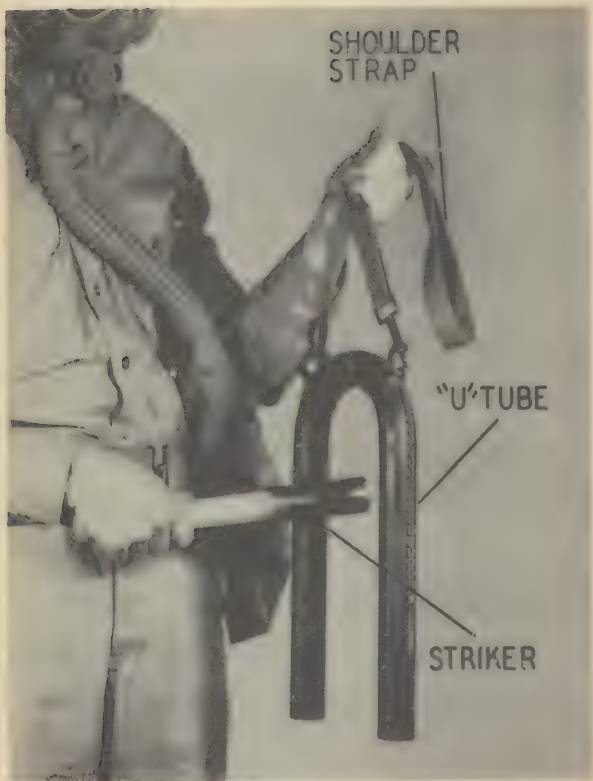
Name and Mark No.	Type	Component Assemblies	Remarks	Price
Mask, gas, horse, M4	Canister	Facepiece with strap and outlet valve. Inlet tube with T connection to two tubes that lead to the two canisters, contained in two leather bags.	Mask is secured over mouth and nose of horse by means of strap. Canisters are carried in bags in front of and on each side of saddle. A canvas bag is provided for mouthpiece and tube when not in use.	(ea) \$25.90
Mask, gas, horse, M5	Do	Facepiece, outlet valve, inlet tube, two canisters attached together, one leather bag.	Canisters of M5 mask are fastened together and are carried in one leather bag on side of horse. Otherwise this mask is similar to the M4.	(ea) \$24.20



PROTECTOR, COLLECTIVE, M2



PROTECTOR, COLLECTIVE, M3

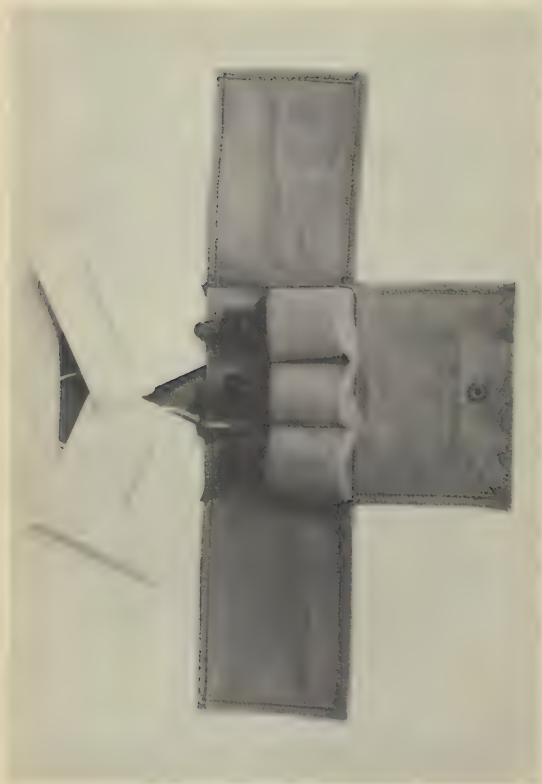


ALARM, GAS, M1.



SACK, GAS-RESISTANT, M1

SACK, GAS RESISTANT, M1



KIT, TESTING, IMPREGNITE IN CLOTHING.

SECTION NO. 6

COLLECTIVE PROTECTION

CHARACTERISTICS OF COLLECTIVE PROTECTORS

Name and Mark No.	Chief Component Assemblies	Type of Power Operation	Chief Use	Normal Rated C.F.M.	Remarks	Price
Protector, collective, M1	Canister M1, blower, by pass, air-blast with foot treadle and connections.	1/2-H.P. electric AC or DC motor.	Permanent installation.	200	Supplied in right hand or left hand type for installation.	(ea) \$848.00
Protector, collective, M1A1	Do	Do	Large permanent installation.	200	Supplied in right hand or left hand type with or without air blast.	(ea) \$1024.00
Protector, collective, M2	Canister M1, blower connections.	3/4-H.P. air-cooled gasoline engine	For field use	306	Has no by-pass, should not be used as a ventilator.	(ea) \$603.00
Protector, collective, M2A1	Canister M1, blower connections.	1/2-H.P. electric AC or DC motor.	Do	200	Do not use as ventilator, same as protective, collector, M2, except for type of power operation.	(ea) \$550.00
Protector, collective, M3	Canister M1, blower connections.	1/2-H.P. electric AC motor or hand crank	Box type for small area or family use.	200	During power failure may be operated by hand crank. No by-pass, do not use as ventilator.	(ea)
Canister, collective, M4	Canister, foot treadle, air intake, blower, and distribution leader.	Electric motor or hand crank.	Box type for small area installation	Motor driven 200 C.F.M. hand-100 C.F.M.	Equipped with hand crank for use during power failure. Treadle to be improvised.	(ea)

CHARACTERISTICS OF COLLECTIVE PROTECTIVE EQUIPMENT

Name and Mark No.	Chief Components	Essential Use	Materials	Remarks	Price
Alarm, gas M1	"U"-tube; handle; shoulder strap	To sound gas alarms	Steel, wood, cloth	The handle is inserted into the tube when not in use.	(ea) \$ 1.45
Crayon, vesicant detector, M7	12 crayons, box	To detect liquid vesicants or vesicant vapor	Chemical-treated wax substance. Resistant. Primary crayon in appearance	Leaves red mark which will turn blue within 15 seconds after contact with liquid vesicant or vesicant vapors (see fig.)	(ea) \$ 2.50
Curtain, gasproof M1	Impermeable cotton curtain; wood strips; grommets.	To seal entrance to gas-proof shelter.	Impermeable cotton cloth, wood strips, grommets.	The strips are so arranged that curtain may be rolled up when not in use. Curtains are issued in pairs only.	(ea) \$ 1.50
Kit, H, vapor detector M4	Wooden chest; 3 jars; bulb; medicine siphon; trip tube; pin; safety matches.	To detect small amount of H vapor in the air.	Jar A - 30 detector tubes. Jar B - 10 MI of sodium hydroxide solution. Jar C - 15 MI of dimethyl sulfate solution.	Directions for use contained in kit.	(ea) \$ 1.50
Paint, liquid vesicant detector, M5	4-oz can, paint	To detect liquid vesicant droplets or spray.	Metal can, olive green paint	Changes to red within 3 seconds after contact with liquid vesicant and persists for 30 min. Does not detect vesicant vapors.	(ea) \$.17

CHARACTERISTICS OF COLLECTIVE PROTECTIVE EQUIPMENT

Name and Mark No.	Chief Components	Essential Use	Materials	Remarks	Price
Paper, liq. res. det. M6	Box of 25 sheets	To detect liq. vesicant drops	Eristol board, olive drab paint.	Upon contact with liquid vesicant changes to red and persists for 30 minutes. Gives no reaction to vesicant vapors.	(ea) \$0.16
Sack, gas resistant, M1	2, 3 or 4 ply paper bag 56" long and 25" wide.	To transfer contaminated clothing to rear areas for decontamination.	Standard kraft paper. Asphalt laminated.	Sack will resist liquid mustard (H) for a period of not less than 4 hours.	(ea) \$0.56

SECTION NO. 7

MISCELLANEOUS EQUIPMENT

CHARACTERISTICS OF MISCELLANEOUS EQUIPMENT

Name and Mark No.	Type	Chief Component	Use	Remarks	Price
Barrel, Steel 30 Gal	Commercial Adapted to CW3 Use.	12 Gauge, Steel Bilge	Sealed shipping of nonvolatile non or slightly corrosive chemicals.	This barrel complies with I.C.C. shipping container, specification No. 6A (I.C.C. Regulations, January 7, 1943.)	(ea.) \$ 9.00
Barrel, Steel 55-Gal.	Do	Do	Do	Do	(ea.) 11.00
Bucket, Glass, 5-Gal.	Do	Glass Body with bail and wood handle	Impregnate 1, CCl ₄ , CCl ₂ , CCl ₃ , containers.	This is a Glass Bucket, 19" x 11" with 4-1/2" screw neck with a metal lid, wire bail with wooden handle.	(ea.) 1.55
Container, 2 Compart-ment, 5-Gal	Sealed Bucket Type	Container, Sheet Steel Inner Container template lead coated. Clinch-er type lid, metal bail, wooden handle	Noncorrosive De-con. Materials.	The dry active agent is contained in the removable inner container. The solvent is contained in the lower part of the sheet steel container.	(ea.) 1.20
Container, Steel, 1-ton Type A	Type A	Tank and operation valves Safety plugs.	Chloropicrin, chlorine, phosgene and other toxic chemicals.	Conforms to I.C.C. Specification No. 106-A500, equipped with chlorine institute valves.	(ea.) 184.00

Name and Mark No.	Type	Chief Component	Use	Remarks	Price
Container, Steel, 1-Ton, Type D	Type D	Steel Plug Body, Large Education Tube and Two Angle Valves	Storage and Shipment of M1 and H3	Conforms to I.C.C. Specification No. 106-A-500 with modifications for C.W.S. use.	(ea.) \$140.00
Drum, Steel, 15-Gal. Painted with Red Lead	Commercial Type	Body of Sheet Steel, 2 Steel Lid Binding Ring with Bolt and Nut.	For the shipment of flammable powder, Grade B or Grade BB.	Conforms to I.C.C. Regulations for the shipment of chloride of lime. Has a large counter sunk disc in top end.	(ea.) 1.45
Drum, Steel 30-Gal.	Commercial Type	Body Plug	Shipment of chemicals with a sq. in. pressure of 20-lbs or less	Conforming to I.C.C. shipping container specification No. 5A when shipping FS, threads should be coated with grease.	(ea.) 7.00
Drum, Steel 55-Gal.	Commercial Type A and B	Body, 2 Plugs	Do	Conforming to I.C.C. shipping container Specification No. 5A with C.W.S. modifications. Type A is equipped with side plug and head plug. Type B has two head plugs.	(ea.) 8.45
Funnel, M1	Flute Type	Body; Strainer with Fluted Spout	To fill the 1-1/2 Gt. Decan. App.	This funnel is supplied and shipped with each apparatus.	(ea.) 0.14
Hydrogen, cylinder	Commercial Type	Cylinder Body and Valves	Storage and shipment of 120 cu.ft./150 lbs.	These cylinders should be returned for refilling.	(ea.) 32.50
Nitrogen, Cylinder	Do	Cylinder Body and Valves	Do	Do	(ea.) 32.50

Name and Mark No.	Type	Chief Component	Use	Remarks	Price
Kit, Fuel Filling, for Portable Flame-thrower, MIA	CWS	6 Batteries, 8 Wrenches, 3 Spark Plugs, 1 Pump Filling 15 Nitrogen Cylinders and valves, 15-Hydrogen Cylinders	To Refill the Portable Flame-thrower, MIA	Nitrogen and Hydrogen is not a component of this Kit and must be requisitioned separately.	(ea.) \$649.00
Kit, Fuel Mixing for Portable Flame-thrower	CWS	2 Pails-5-Gal. Lug Covered; 1 Pail-10-Gal; 1 Scale, Mills; 1 Funnel	To mix the Fuel for Portable Flame-thrower, MIA	This Kit is used to mix the Napalm and Gasoline.	(ea.) 254.00
Kit, Service for Portable Flame-thrower, MIA	CWS	Spare Parts; Charging Equipment; Tools, Miscellaneous Supplies.	To service the Portable Flame-thrower, MIA.	This Kit contains the necessary equipment to make field repairs and adjustments on the Portable Flame-thrower, MIA.	(ea.) 254.00
Set, Accessories, for Identification-Mix. Detector, MIA	CWS	Coil of 500' Rubber Covered " Gauge Wire, Fuel of 100' of 18-Gauge Rubber Covered Wire, Flame-Blasting Machine 10 Gals Capacity	Used with the Gas Ident. Detector, M1	This Set is necessary to operate the Gas, Gas Identification, Detector, M1.	(ea.) 46.30
Set, Detector for Gas Identification-Mix. Detector, MIA	CWS	16 Gal. red Detector Rubber Rack, 10-1/2" x 14", 1" x 1/2" x 1/2" x 1/2"	For training and instruction	This Set is primarily for schools and training centers.	(ea.) 30.30

Name and Mark No.	Type	Chief Component	Use	Remarks	Price
Set, Gas, Identification, Detonation, M1	CWS	Steel Shipping Cont. 4 Multiple Tube Fiber of Tin Cont. each holding 15-Glass Tubes - 3 H, 3-L, 3-FS, 3-CG; Instru. for use 1 Roll of Adhesive	Used for Instructional and training purposes	Empty containers should be returned to WWS Depot, Eagle and Arsenal, Maryland. 70- NO 8 Electric Detonators with 6" lead wire are necessary for the operation of the Set and must be requisitioned separately.	(ea.) \$ 72.70
Set, Gas, Identification, Instructional, M1	CWS	Box, 7-4-oz Btls; 1 CG, 1-PS, 1-CN, 2-H, 1-L, 1-DM.	Do	One copy of "Instructions for Use with Set" is packed in each Set.	(ea.) 28.50
Set, Gas, Toxic, M1	CWS	Steel Container, Containing 7-Fiber Containers holding 32-4-oz Btls, Filled with H.	By the Field Units for training purposes	The empty steel container should be returned according to instructions.	(ea.) 20.70
Set, Sample Replacement (Gas Ident. Instructional M1)	CWS	Box, Absorbent Packing Materials, 2 Bottles of Any Agent Similar to Ones in the Set, Gas, Ident. Instr. M1.	To replace the Contents of Gas Ident. Instr. M1.	The type of filling for the bottles must be specified.	(ea.) 11.25
Starter, Fire, M1	CWS	Two-Compartment Cellulose Nitrate Tubes Containing incendiary Oil, Match Head Pellet, Parachute Striker Disc.	For use by Mountain Jungle or Parachute	This is used to start a fire under conditions where ordinary matches would be unsatisfactory.	(ea.) 0.30

SECTION NO. 8

CONVERSION FACTORS

TABLE OF CONVERSION FACTORS

<u>MULTIPLY</u>	<u>BY</u>	<u>TO OBTAIN</u>
Acres	43,560	Square Feet
"	4047	Square Meters
"	4840	Square Yards
Acre-Feet	325,851	Gallons
"	1233.49	Cubic Meters
Barrels-Oil	42	Gallons-Oil
Centigrams	0.01	Grams
Centiliters	0.01	Liters
Centimeters	0.3937	Inches
Centimeters	0.01	Meters
"	10	Millimeters
Centimeters of Mercury	0.01316	Atmospheres
"	136.0	Kgs./Sq. Meter
Cubic Centimeters	$3.531 \times (10)^{-5}$	Cubic Feet
"	$2.642 \times (10)^{-4}$	Gallons
"	10^{-3}	Liters
"	$1.057 \times (10)^{-3}$	Quarts (Liq)
Cubic Feet	0.02832	Cubic Meters
"	0.03704	Cubic Yards
"	7.48052	Gallons
"	28.32	Liters
Cubic Inches	16.39	Cubic Centimeters
"	$1.639 \times (10)^{-5}$	Cubic Meters
"	$4.329 \times (10)^{-3}$	Gallons
"	$1.639 \times (10)^{-2}$	Liters
Cubic Meters	35.31	Cubic Feet
"	61.023	Cubic Inches
"	264.2	Gallons
Cubic Meters	103	Liters
Feet	30.48	Centimeters
"	0.3048	Meters
Gallons	3785	Cubic Centimeters
"	0.1337	Cubic Feet
"	3.785	Liters
Gallons, Imperial	1.20095	U.S. Gallons
" U. S.	0.83267	Imperial Gallons
Gallons, Water	8.3453	Pounds of Water

Table of Conversion Factors (Cont'd)

<u>MULTIPLY</u>	<u>BY</u>	<u>TO OBTAIN</u>
Grams	0.03527	Ounces
"	$2.205 \times (10)^{-3}$	Pounds
Horse-Power	33,000	Foot-Lbs./Min.
"	1.014	Horse-Power (Metric)
Inches	2.540	Centimeters
Kilograms	980,665	Dynes
"	2.205	Lbs.
"	$1.102 \times (10)^{-3}$	Tons (Short)
Kilometers	105	Centimeters
"	3281	Feet
"	103	Meters
"	0.6214	Miles
"	1094	Yards
Liters	103	Cubic Centimeters
"	0.03531	Cubic Feet
"	61.02	Cubic Inches
"	$(10)^{-3}$	Cubic Meters
"	$1.308 \times (10)^{-3}$	Cubic Yards
"	0.2642	Gallons
"	2.113	Pints (Liq)
Meters	100	Centimeters
"	3.281	Feet
"	39.37	Inches
"	1.094	Yards
Miles	5280	Feet
"	1.609	Kilometers
"	1760	Yards
Ounces	16	Drams
"	437.5	Grains
"	0.0625	Pounds
"	28.349527	Grams
Ounces (Fluid)	1.805	Cubic Inches
"	0.02957	Liters
Pounds	16	Ounces
"	256	Drams
"	7000	Grains
"	0.0005	Tons (Short)
"	453.5924	Grams

Table of Conversion Factors (Cont'd)

<u>MULTIPLY</u>	<u>BY</u>	<u>TO OBTAIN</u>
Quarts (Dry)	67.20	Cubic Inches
Quarts (Liq)	57.75	Cubic Inches
Quintal, Argentine	101.28	Pounds
" Brazil	129.54	Pounds
" Castile, Peru	101.43	Pounds
" Chile	101.41	Pounds
" Mexico	101.47	Pounds
" Metric	220.46	Pounds
Square Centimeters	$1.076 \times (10)^{-3}$	Square Feet
"	0.1550	Square Inches
"	$(10)^{-4}$	Square Meters
"	100	Square Millimeters
Square Feet	929.0	Square Centimeters
"	144	Square Inches
"	0.09290	Square Meters
"	$3.58 \times (10)^{-8}$	Square Miles
Square Inches	6.452	Square Centimeters
"	$6.944 \times (10)^{-3}$	Square Feet
"	645.2	Square Millimeters
Square Kilometers	10.76×10^6	Square Feet
"	10^6	Square Meters
"	0.3861	Square Miles
"	0.096×10^6	Square Yards
Square Meters	10.76	Square Feet
"	$3,861 \times (10)^{-7}$	Square Miles
"	1.196	Square Yards
Square Miles	27.88×10^6	Square Feet
"	2,590	Square Kilometers
"	3.098×10^6	Square Yards
Square Yards	9	Square Feet
"	0.8361	Square Meters
"	$3.228 \times (10)^{-7}$	Square Miles
Temp. (°C) / 273	1	Abs. Temp. (°C.)
" / 17.78	1.8	Temp. (°F.)
" (°F.) / 460	1	Abs. Temp. (°F.)
" - 32	5/9	Temp. (°C.)

Table of Conversion Factors (Cont'd)

<u>MULTIPLY</u>	<u>BY</u>	<u>TO OBTAIN</u>
Tons (Long)	1016	Kilograms
"	2240	Pounds
"	1.12000	Tons (Short)
Tons (Metric)	103	Kilograms
"	2205	Pounds
Tons (Short)	2000	Pounds
"	907.18476	Kilograms
Tons (Short)	0.90718	Tons (Long)
"	22400.66	Ounces (Troy)
"	0.90718	Tons (Metric)
Yards	91.44	Centimeters
"	3	Feet
"	36	Inches
"	0.9144	Meters

SECTION NO. 9

LOGISTICAL DATA

LOGISTICAL DATA - CHEMICAL WARFARE ITEMS

Nomenclature	Page No.	Unit	Units Per Package	Type Of Package	Av. Unit Shipping Wt. in Lbs.	Av. Unit Shipping Cu. In. Cu. Ft.	Shipping Name
Acetylene tetrachloride		lb.	700	55-gal. drum	1.077	0.0155	
Adamsite		lb.	300	55-gal. drum	1.37	0.0362	Diphenylaminechlorarsine
Adapter, line filling, one-ton container, M1		ea.					
Agent, decontaminating, Simulated, M1		lb.	4.5	Carton	1.09 lb/lb	0.523/lb	Dry paint
Agent, decontaminating, simulated, M2		lb.	50	Fiber drum	1.13 lb/lb	.0548/lb	Dry paint
Agent, decontaminating M2		ea.	2	crate	75.30	1.97	Chemicals, NOIBN
Agent, decontaminating, M4		ea.	2	crate	75.30	1.97	Chemicals, NOIBN
Alarm, gas, M1		ea.	20	Box	6.4	0.165	Hardware, NOIBN, iron or steel
Apparatus, charging, portable cml cylinder, M1		ea.	1	Box	69	4.1	
Apparatus, decontaminating, 3-gal., M1		ea.	4	Crate	18	2.7	Sprayers, NOIBN
Apparatus, decontaminating, 1-1/2-gt., M2		ea.	36	Crate	6.25	0.281	Sprayers, NOIBN
Apparatus, decontaminating, power-driven M3A1		ea.	1	Crate	11,233	1,204	Sprayers, NOIBN

Nomenclature	Page No.	Unit	Units per Package	Type Of Package	Av. Unit Shipping Wt. In Lbs.	Av. Unit Shipping Cu. In Cu. Ft.	Shipping Name
Apparatus, decontaminating Power-driven, M4 (skid mounted)		ea.	1	Crate	4,666	333	Sprayers, NOIBN
Barrel, steel, 30-gal.		ea.	1	none	77	6.65	
Barrel, steel, 55-gal.		ea.	1	None	115	11.41	
Beam, grab, M1		ea.	1	Box	159	1.6	Mach. parts, NOIBN or steel
Blasting, Mach. 100-cap		ea.	1	Box	26	.81	
Bleaching material, grade B		lb.	100	Drum, 15-gal.	1.21 lb/lb	.035/lb	Bleach, chloride of lime pow.
Bleaching material, grade B (tropical type)		lb.	100	Drum, 15-gal.	1.21 lb/lb	.035/lb	Do
Bomb, incendiary, instructional, M1		ea.	24	Box	1.582	0.0305	
Bomb, incendiary, instructional, M2		ea.	24	Box	2.5	0.0315	
Bomb, incendiary, 100-lb., M47		ea.	1	Box	68 Empty	3.04	Bombs, incendiary
Bomb, chemical, 100-lb, M47A2		ea.	1	Box	62 Empty	3.04	Bomb, gas
Bomb, smoke, WP, 100-lb., M47A2		ea.	1	Box	120 Filled	3.04	Same

Nomenclature	Page No.	Unit	Unit Per Package	Type Of Package	Av. Unit Shipping Wt. In Lbs.	Av. Unit Shipping Cu. In. Cu. Ft.	Shipping Name
Bomb, incendiary, 100-lb. M47A2		ea.	1	Box	119 Filled	3.04	Bomb, incendiary
Bomb, incendiary, 4-lb., AN-M50A1			See cluster, M1				Same
Bomb, incendiary, 4-lb., AN-M50XA1			See cluster, M1				Same
Bomb, incendiary, magnesium, 2-lb., AN-M52			See cluster, M3				Same
Bomb, incendiary, 4-lb., AN-M54			See cluster, M2				Same
Bomb, incendiary, 4-lb., AN-M54X			See cluster, M2				Same
Bomb, smoke, 10-lb., AN-M67			See cluster, M5				Bomb, smoke
Bomb, incendiary, oil, 6-lb., AN-M69			See cluster, M4				Bomb, incendiary
Bomb, chemical, 115-lb., M70		ea.	1	Box	150	5.08	Bomb, gas
Brush, decontaminating, w/handle, M1		ea.	48	Box	2.6	.1443	Brushes, NO1EN
Bucket, Glass, 5-gal.		ea.	1	Box	15	1.46	Glassware, NO1EN
Burster, detonating cord, chemical land mine, M3		ea.	200	Box	0.300	0.016	

Monochlature	Page No	Unit	Units per Package	Type of Package	Av. Unit Shipping Wt. in Lbs.	Av. Unit Shipping Wt. in Cu. Ft.	Shipping Name
Burster, chemical land mine, M4		ea.	50	Box	0.070	0.0027	Bursters or detonating fuzes
Candle, gas, irritant, DM M2		ea.	10	Box	13.4	.4436	
Canister, acid vapor, M1		ea.	20	Box	3.9	.1375	Filters, HCN
Canister, all purpose, M1		ea.	30	Box	5.8687	.1334	Filters, HCN
Canister, ammonia M1		ea.	20	Box	4	.1375	Same
Canister for collective protector, M1 or M2		ea.	1	Box	4.33	14.97	Same
Canister, for collective protector, M3		ea.	1	Box	1.39	4.51	Same
Canister, HCN, M1		ea.	20	Box	4	.1375	Same
Canister, noncombatant, M1		ea.	50	Box	.74	.0576	Same
Canister, oil vapor, M1		ea.	20	Box	3.6	.1375	Same
Canister, optical, M1		ea.	50	Box	1.8	.074	Same
Canister, service, MIXA1		ea.	20	Box	3.333	.1719	Same

Nomenclature	Page No.	Unit	Units Per Package	Type Of Package	Av. Unit Shipping Wt. in Lbs.	Av. Unit Shipping Cu. in Cu. Ft.	Shipping name
Canister, Service, MIXA2		ea.	20	Box	3.333	.1712	Filters, NOIBN
Canister, Service, M10		ea.	50	Box	2.8	.096	Same
Canister, training, M1		ea.	50	Box	1.14	.058	Same
Capsule, CN		ea.	1,250	Box	.0402	.00203	
Carrier, gas mask, MIV		ea.	100	Box	1.28	.0697	Haversacks or knapsacks (carriers, gas mask
Carrier, gas mask, MIVA1		ea.	100	Box	1.28	.0697	Do
Carrier, gas mask, MV		ea.					Do
Carrier, gas mask, M6		ea.	400	Box	1.3	.0576	Do
Carrier, gas mask, non-combatant, MI		ea.	400	Box	.29	0.0145	Do
Carrier, gas mask, training, M1		ea.	400	Box	.29	0.0145	Do
Cart, 4.2" chemical mortar MIA1		ea.	1	Crate	311	39.2	Cart, hand NOIBN, S.U.

Nomenclature	Page No.	Unit	Units Per Package	Type Of Package	Av. Unit Shipping Wt. In Lbs.	Av. Unit Shipping Cu. In Cu. Ft.	Shipping name
Cart, 4.2 " chemical mortar ammunition MIA1		ea.	1	Crate	293	39.2	Cart, hand NOIBN S. U.
Cart, 4.2" chemical mortar and ammunition MIA1		ea.	1	Crate	311	33.2	Same
CC No. 2		lb.	198	Box	1.12	.0537	Chemicals, NOIBN
CG (Phosgene)		lb.	1,650	Ton cont.	2	.0273	Chlorine chloride
Chlorinated paraffin		lb.	550	Drum	1.094 lb/lb	.0237 cu.ft/lb	
Chlorine (Cl)		lb.	1,800	Ton cont.	1.92 lb/lb	.0243	Chlorine gas, liquified
Chlorpicrin (PS)		lb.	83	cylinder	2.17	.0151	Chlorpicrin
Cluster, 100-lb., Incendiary bomb, M1		ea.	1	Box	175	4.03	Bomb, incendiary
Cluster, 500-lb., Incendiary bomb, M1		ea.	1	Box	590	9.68	Bomb, incendiary
Cluster, 100-lb., Incendiary bomb, M2		ea.	1	Box	225	4.03	Bomb, incendiary
Cluster, 500-lb., Incendiary bomb, M2		ea.	1	Box	625	9.68	Bomb, incendiary
Cluster, 100-lb., Incendiary bomb, M3		ea.	1	Box	138	3.97	Bomb, incendiary
Cluster, 500-lb., Incendiary bomb, M3		ea.	1	Box	412	9.05	Bomb, incendiary

Nomenclature	Page No.	Unit	Units Per Package	Type Of Package	Av. Unit Shipping Wt. In Lbs.	Av. Unit Shipping Cu. In Cu. Ft.	Shipping name
Cluster, 100-lb., incendiary bomb, M4 (oil)		ea.	1	Box	123	3.5	Bomb, incendiary
Cluster, 500-lb., incendiary bomb, M4		ea.	1	Box	477	12.9	Bomb, incendiary
Cluster, 100-lb., smoke bomb, M5		ea.	1	Box	178	3.5	Bomb, smoke
Cluster, 500-lb., smoke bomb, M5		ea.	1	Box	705	12.9	Bomb, smoke
Container, 2 compartment, 8-gal (filled)		ea.	2	Crate	75.5	1.815	
Container, steel, 1-ton, Type-A (empty)		ea.	1	None	1310	41.7	Tanks, Multiple unit, car, steel
Container, steel, 1-ton, Type-B (empty)		ea.	1	None	1310	41.7	Same as above
Cover, outlet valve, M1		ea.			.075	.006	
Cryon, vesicant detector, M1		ea.	1152	Crate	.06	.00066	Chemicals, NOIBN
Curtain, gasproof, M1		ea.	2	Box	14.5	.68	With tear shades NOIBN (curtain gasproof)
Cylinder, portable, chemical, MIA2		ea.	2	Crate	46.5	2.175	
Detonators, No. 8 with 30-ft. leads (DuPont)		ea.	250	Box	.304	.00536	

Nomenclature	Page No.	Unit	Units Per Package	Type Of Package	Av. Unit Shipping Wt. In Lbs.	Av. Unit Shipping Cu. In Cu. Ft.	Shipping name
Detonators, No. 8, with 30-ft. leads (Hercules)		ea.	200	Box	.325	.0119	
Disinfectant, gas mask, M1		4 oz. btl.	80	Box	.73	.0362	Disinfectants, NOIBN
Drum, steel, 15-gal., painted with red lead		ea.	1	None	18	3.45	
Drum, steel, 50-gal.		ea.	1	None	88	1.97	
Drum, steel, 55-gal.		ea.	1	None	126	13.88	
Flame-thrower, portable, M1A1		ea.	2	Chest	65	3.6	Portable flame-thrower rated under item 24.200FC (No. 15)
Formaldehyde		Qt. Btl.	24	Case	4.29	.1104	Formaldehyde
Fuze							
Fuze and detonator, #8		ea.	400	Box	.075	.04058	
Fuze, tear gas pot, E1		ea.	200	Box	.078	.00175	
Generator, oil smoke, M1 (Stationary)							Sprayers, NOIBN
Generator smoke, mechanical M1 (100-gallon)		ea.	1	Crate	3000 less trailer	286 less trailer	Sprayers, NOIBN
Generator, smoke, vehicular type, M1		ea.	5	Crate	60	3.704	Sprayers, NOIBN
Grenade, frangible, M1		ea.	48	Box	3.59	.152	

Nomenclature	Page No.	Unit	Units Per Package	Type Of Package	Av. Unit Shipping Wt. In Lbs.	Av. Unit Shipping Cu. In. Cu. Ft.	Shipping name
Grenade, hand, irritant, CN-DM, M6		ea.	25	Box	2.092	.0535	Grenades, hand, incendiary gas, smoke or tear producing.
Grenade, hand, smoke, WP, M15		ea.	25	Box	1.92	.0416	Do
Grenade, hand, tear, CN, M7		ea.	25	Box	1.92	.0535	Do
Grenade, incendiary, AN-M14		ea.	25	Box	2.2	.0416	Do
Grenade, smoke, colored, M16		ea.	25	Box	1.92	.0416	Do
Grenade, Smoke, red, AN-M3		ea.	25	Box	2.4	.084	Do
Grenade, smoke, white, HC, AN-M8		ea.	25	Box	1.92	.0535	Do
Hexachlorethane mixture (HC)		lb.	700	55-gal. drum	1.18 lb/lb	.0155 cu.ft/lb	Chemicals, NOIBN
Hydrocyanic acid (H.C.N.)							Chemicals, NOIBN
Hydrogen		ea.	1	Steel cylinder	130	3.4	
Igniter, grenade, frangible, M2		ea.	200	Box	.028/igniter	.0022/igniter	
Impregnite, I		lb.	25	Glass bucket	1.61lb/lb.	.0562/lb	Chemicals, NOIBN
		lb.	100	Fiber drum	1.12lb/lb	.0356/lb	

Nomenclature	Page No.	Unit	Units Per Package	Type Of Package	Av. Unit Shipping Wt. In Lbs.	Av. Unit Shipping Cu. In. Cu. Ft.	Shipping name
Impregnate, shoe		ea.	48	Box	.9178	.026	Shoe dressing
Kit, fuel filling, for portable flame-thrower, MIA1		ea.	1	Chest	196	10.84	
Kit, fuel mixing, for portable flame-thrower, MIA1		ea.	1	Box	55	6.35	
Kit, gas mask, water-proofing, M1		ea.	300	Box	.24	.0125	
Kit, H Vapor Detector, M4		ea.	50	Box	2.4	.0998	App, chemical lat., NCIEN
Kit, repair, gas mask, company, M11		ea.	144	Box	.48611	.0487	Kit, gas mask, repair/rated 1st class under rule (L.A.)
Kit, repair, gas mask, Univ.		ea.	24	Box	4.00	.0958	
Kit, service for portable flame-thrower, MIA1		ea.	1	Box	140	9.8	
Laboratory, field, CWS, M1		ea.		Boxes	11,130	1005	
Lewisite (L)		lb.	1885	Ton cont.	1.877 lb/lb	.0238	Gases, NO1EN Poison
Lighter, Fuze		ea.	400	Box	.0425	.061875	
Line, filling, chemical pump apparatus		ea.	1	Box	128	5.5	Hand pump, 1-1/2 in. flex. hose
Line, filling, Ap smoke tank, M1		ea.	1	Box	37	2.1	

Nomenclature	Page No.	Unit	Units Per Package	Type Of Package	Av. Unit Shipping Wt. In Lbs.	Av. Unit Shipping Cu. In. Cu. Ft.	Shipping name
Line, filling, Ap smoke tank, M2		ea.	1	Box	33	1.43	
Line, filling, Ap smoke tank, M3							
Mask, gas, diaphragm, M3		ea.	10	Box	10	.58	Gas mask
Mask, gas, diaphragm, M3A1		ea.	10	Box	10	.58	Gas mask
Mask, gas, horse, M4		ea.	1	Carton	16.43	1.956	Gas mask
Mask, gas, horse, M5		ea.	1	Carton	15.43	1.956	Gas mask
Mask, gas, noncombatant, M1		ea.	20	Box	3.15	.20	Gas mask
Mask, gas, noncombatant, M1A1		ea.	20	Box	3.15	.20	Gas mask
Mask, gas, noncombatant, M1A2		ea.	20	Box	3.15	.20	Gas mask
Mask, gas, optical, M1		ea.	20	Box	6.55	.52	Gas mask
Mask, gas, service, M1A1		ea.	12	Box	7.5	.54	Gas mask
Mask, gas, service, M1A2		ea.	12	Box	7.5	.54	Gas mask
Mask, gas, service, M2A1		ea.	10	Box	8	.56	Gas mask
Mask, gas, service, M2A2		ea.	10	Box	8.4	.568	Gas mask
Mask, gas, service, lightweight, M2		ea.	20	Box	6.75	.563	Gas mask
Mask, gas, training, M2A1		ea.	20	Box	3.65	.24	Gas mask

Nomenclature	Page No.	Unit	Units Per Package	Type Of Package	Av. Unit Shipping Wt. In Lbs	Av. Unit Shipping Cb. In Cu. Ft.	Shipping name
Mask, gas, training, M2A2		ea.	20	Box	3.05	.24	Gas mask
Mechanism, valve replacement, M1		ea.	1	Box	312.0	14.67	Machinery of Machine N. 1BN
Mine, land, chemical 1-gallon (Empty)		ea.	10	Carton	3.25	.214	
Molasses residuum (MR)		lb.	447	55-gal. drum	1.25 lb/lb.	.0233/lb	Molasses re- siduum, dis- tillery
Mortar, chemical, 4.2" M2 (with accessories)		ea.	1	In 3 boxes	566.4	20.55	
Mortar, chemical, 4.2" M1A1 (with accessories)		ea.	1	In 3 boxes	566.4	20.55	
Mustard gas (H)		lb.	1885	Ton cont.	1.377 lb/lb	.0238	Gases, NO1BN Poison
Nitrogen		ea.	1	Steel cylinder	130	3.4	
Ointment, protective		ea.	384	Box	.390	.0164	Chemicals, NO1BN
Paint, liquid vesicant detector, M5		ea.	48	Carton	.4887	.0066	Paint, NO1BN Liquid
Paper, liquid vesicant detector, M6		ea.	100	Carton	.36	.0088	Paper, NO1BN
Paraffin, chlorinated		lb.	550	55-gal. drum	1.094 lb/lb	.0237/lb	
Plant, impregnating, M1		ea.	1	Boxes	80,000	6,000	Clothes, impreg- nating plant (rat- ed under item 31890 CFC No. 15)

Nomenclature	Page No.	Unit	Units Per Package	Type Of Package	Av. Unit Shipping Wt. In Lbs.	Av. Unit Shipping Cu. In Cu. Ft.	Shipping Name
Plant, Impregnating, M2		ea.	1	22 boxes	69,567	5941	Same as last item on preceding page
Pot, smoke, HC, M1		ea.	6	Box	17	.283	Smoke pots nonpoisonous
Pot, smoke, miniature, M1		ea.		Box		.0186	Do
Pot, smoke, floating, HC, M4		ea.	4	Crate	45	1.68	Do
Pot, tear gas, CN, M1		ea.	50	Box	1.607	.052	Do
Phosgene (CG)		lb.	335	Steel cyl.	2.23 lb/lb	.0193/lb	Carbonyl chloride
		lb.	3305	Ton cont.	2.0 lb/lb	.0272/lb	
Primacord		Ft.	1000	Roll	.024 lb/ft	.0006/ft	
Projector, Livens, M1		ea.	1	2 boxes	182	4.03	
Projector, Livens, M**		ea.	1	2 boxes	227	5.31	
Protector, collective, M1		ea.	1	4 crates	1938	97.52	Air cleaners, etc.
Protector, collective, M1A1		ea.	1	2 crates	1688	78.22	Do
Protector, collective, M2		ea.	1	4 crates	809	71.40	Do
Protector, collective, M1A1		ea.	1	3 crates	848	58.48	Do
Protector, collective, M3		ea.	1	2 crates	350	17.55	Do
Protector, collective, M4							Do
Respirator, dust commercial type		ea.	50	Box	.84	.16	Filters, NOBEN
Respirator, dust, M1		ea.	60	Box	.583	.0637	Do
Respirator, dust, M2		ea.	120	Box	.40	.0331	Do
Sack, gas, resistant, M1		ea.	25	Box	2.7	.115	Bagpaper, garment storage

Nomenclature	Page No.	Unit	Units Per Package	Type Of Package	Av. Unit Shipping Wt. In Lbs.	Av. Unit Shipping Cu. In Cu. Ft.	Shipping name
Set, antidim, M1		ea.	500	Box	.097	.0048	Buffing or polishing compounds NOCBN
Set, accessories and spare parts, for 4.2" chemical mortar		ea.	1	Chest	229	6.8	
Set, accessories (gas identification detonating), M1							
Set, accessories, Livens projector, M1		ea.	1	4 Boxes	280	13.53	Scientific instruments, NOCBN
Set, accessories, 4.2" chemical mortar & ammunition carts, M1A1		ea.	10	Box	5.5	.10	
Set, drawings, colored, Cml Warfare Material		ea.	1	Box	27	.96	
Set, equipment, maintenance & repair, M1		ea.	1	18 Boxes	4218	239.25	
Set, gas identification, detonation, M1		ea.	1	Steel tube	78	2.0	
Set, gas identification, instructional, M1		ea.	1	Box	87	3.2	Chemicals, NOCBN
Set, gas, toxic, M1		ea.	1	Steel tube	78	2.0	
Set, sample replacement (gas identification, detonation) M1		ea.	1	Box	23	.96	

Nomenclature	Page No.	Unit	Units Per Package	Type Of Package	Av. Unit Shipping Wt. In Lbs.	Av. Unit Shipping Cu. In Cu. Ft.	Shipping name
Shell, 4.2" chemical mortar M2, (Filled)		ea.	2	Box	32.5	.55	
Shell, 4.2" chemical mortar, M3 (Filled)		ea.	2	Box	32.5	.55	
Shell, Livens projector, MII		ea.	1	Box	51	1.4	
Squib, electric		ea.	500	Box	.08	.00282	
Starter, fire, M1		ea.	864	Box	.25	.0074	
Stand, carrying, (Ap smoke tank), M1		ea.	1	Crate	50	12	Stands, NOIBN
Stand, Holding, (Ap smoke tank), M5		ea.	1	Crate	61	4.08	Stands, NOIBN
Stand, loading (Ap smoke tank), M1							Stands, NOIBN
Stand, loading (Ap smoke tank), M2							Stands, NOIBN
Stand, platform, (Ap smoke tank), M6							Stands, NOIBN.
Sulphur trioxide-chlorosulfonic acid solution (FS)		lb.	700	55-gal. drum	1.18	.0155	Chemicals, NOIBN
Tank, smoke, airplane, M19		ea.	?	Crate	140	28.8	Tanks, iron or steel
Tank, smoke, airplane, M20		ea.	1	Crate	272	19	Do

Nomenclature	Page No.	Unit	Units Per Package	Type Of Package	Av. Unit Shipping Wt. In Lbs.	Av. Unit Shipping Cu. In. Cu. Ft.	Shipping name
Tank, smoke, AP, M20A1		ea.	1	Crate	260	18	Tanks, iron or steel
Tank, smoke, Ap, M21		ea.	1	Crate	169	16.6	Do
Tank, smoke, Ap, M21A1		ea.	1	Crate	169	16.6	Do
Tank, smoke, Ap, M33		ea.	1	Crate	240	66	Do
Tear gas (CN)		lb.	300	55-gal. drum	1.37	.0362	Chloroaceto-phenone
Tear gas solution (CNS) (CNE)		lb.	500	55-gal. drum	1.26	.0255	Do
Titanium tetrachloride (FM)		lb.	725	55-gal. drum	1.66	.0198	Titanium tetrachloride
Tractor, crane, M1		ea.	1	Not boxed	11,800	865	Tractor, NCIBN
Trailer, cml handling, M2		ea.	1	Not boxed	2,110	511	Freight trailer, NCIBN
Trailer, cml service, M1		ea.	1	Not boxed	2,755	993	Do
Truck, cml service M1		ea.	1	Not boxed	11,100	2011	Freight automobile
Truck, crane, swinging boom, M1		ea.	1	Not boxed	18,400	2464	Do
Truck, tank, hand, M1		ea.	1	Crate	375	29	Lift truck hand
Valve, 3/4" (for chlorine cylinder)		ea.	87	Box	1.735	.1735	

Nomenclature	Page No.	Unit	Units Per Package	Type Cf Package	Av. Unit Shipping Wt. In Lbs.	Av. Unit Shipping Cu. In Cu. Ft.	Shipping name
Valve, discharge, 3/4", ton container		ea.	87	Box	1.735	.1735	
Valve, gas, toxic, M1 (Liberty)		ea.	50	Box	2.58	.0278	
Valve, gas, toxic, M2 (Liberty)		ea.	50	Box	2.58	.0278	
Valve, phosgene		ea.	100	Box	1.5	.0139	
White phosphorus (WP)		lb.	380	55-gal. drum	1.28 lb/lb	.0166 cu.ft/lb.	Phosphorus, NOIBN
Wrench, offset opening 1-19/64" (for liberty valve)		ea.	24	Box	3.75	.0445	Wrenches, NOIBN
Wrench, single-head, milled opening, 1-1/4" (for liberty valve)		ea.	36	Box	1.27	.015	Do
Wrench, socket opening, 41/64" (for 1-ton container pipe plug)		ea.	24	Box	1.66	.0418	Wrenches, NOIBN w/o attachments
Wrench, valve opening, (for 1-ton container)		ea.	60	Box	.3	.0006	Do
Wrench, valve removing, M1 (for Type D containers)		ea.	1	Carton	10.5	.565	Do
Wrench, valve removing, M2 (for Type A containers)		ea.	1	Carton	11	.546	Do

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